



THREE-POSITION AIR RIFLE MATCH OFFICIALS MANUAL

**Published by the National Three-Position Air Rifle
Council and the Civilian Marksmanship Program
as a Guide for Three-Position Air Rifle Match Officials
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INTRODUCTION

This **Three-Position Air Rifle Match Officials Manual** is published by the **National Three-Position Air Rifle Council** and the Civilian Marksmanship Program (CMP) to give 3PAR Match Officials a guide to use when they organize or serve during 3PAR competitions. This manual is designed as a reference that Match Officials can use to apply 3PAR Rules and resolve issues that arise during competitions. The Council is the primary National Governing Body for Three-Position Air Rifle competitions in the USA. It consists of representatives of national organizations and firms that actively promote 3PAR competitions for school-age athletes. Council members are Air Force JROTC, American Legion, Army JROTC, Civilian Marksmanship Program, Crosman Shooting Services, Daisy Shooting Education Program, Marine Corps JROTC, Navy JROTC, 4-H Shooting Sports, Orion Scoring Systems, U. S. Army Marksmanship Unit and USA Shooting. The National Council is responsible for deciding the contents of the **National Standard Three-Position Air Rifle Rules** (NS3PAR Rules).

Abbreviations Used in this Guide

3PAR	Three-position air rifle
CRO	Chief Range Officer (officer in charge of range firing)
CSO	Chief Statistical Officer (officer in charge of scoring & results)
EIC	Excellence-in-Competition
EST	Electronic scoring targets
ISSF	International Shooting Sports Federation
MD	Match Director or Competition Director
MMS	Match Management System
RIF	Range Incident Form
RO	Range Officer (works on firing line)
SO	Statistical Officer (includes target Scorers)
TO	Technical Officer (operates electronic targets)

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To use this manual more effectively, study this Table of Contents to familiarize yourself with how the manual is structured. Note how there are separate sections for Air Rifle Range Operations, Electronic Target Operations, the Conduct of Finals, Scoring and Results Operations, Rule Violations and Protests, Planning and Organizing 3PAR Competitions and Equipment Control Testing. Specific topics covered in those sections are listed. By knowing which section applies for your duties as a Match Official, you can then look for specific topics within that section to find the information you need.

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GENERAL INFORMATION

3PAR VALUES AND PRINCIPLES

3PAR competition shooting is the most popular form of junior rifle shooting in the USA. 3PAR competitions are guided by values and principles that Match Officials need to understand and respect:

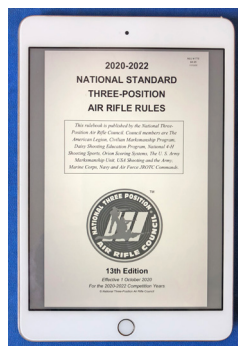
- **3PAR Target Shooting is a Sport.** 3PAR competitions are part of the complex of youth sports that promote personal development by giving participants the positive lessons youth sports can teach. To emphasize its identity as a sport, 3PAR competition participants are referred to as “athletes” (not as shooters or competitors).
- **3PAR Competitions are for School Age Athletes.** The upper age limit for 3PAR participation is determined by when an athlete graduates from high school or the equivalent. Generally, athlete eligibility concludes at the end of the summer after graduation from high school. AR3.1.
- **3PAR Competitions Offer Sporter and Precision Class Competitions.** Sporter Class rifles are limited in price (\$650 maximum, AR4.2.1 c) and athletes are not permitted to use shooting jackets or special shooting clothing. Sporter Class events promote mass participation by striving to keep costs and equipment affordable and controlled. Precision Class rifle and shooting clothing rules are generally the same as those permitted by ISSF and USA Shooting Rules. Precision Class events promote high performance training and competition for junior athletes.
- **3PAR Rules Generally Follow ISSF Rules.** There are exceptions, especially with regard to Sporter Class rules, but the basic structure of 3PAR competitions is modeled after ISSF rifle events that are included in the Olympics, World Championships, National Championships and NCAA Rifle Championships. AR1.2.
- **3PAR Events or Courses of Fire.** Three-position events or courses of fire call for firing equal numbers of shots in three different firing positions, prone, standing and kneeling (*usually fired in that order*) at a distance of 10 meters on ISSF 10m air rifle targets. Standard courses of fire are 3x10 shots or 3x20 shots. Events may or may not include finals for

the top eight athletes in an event. Finals may offer either 10 additional shots in the standing position or a start-from-zero final consisting of 15 shots fired in each position (45 shots total).

- **Local Team and Club Development.** 3PAR Rules are designed to support the development and integrity of local school and club teams and to discourage the recruiting of all-star teams by ‘cherry-picking’ top athletes from other teams, often with athletes who do not live near or train with that team. 3PAR Rules generally require team members to live in the same area and to train and compete regularly with their teams. AR3.2.
- **Female and Male Athletes Compete Together.** There are no significant statistical differences between scores produced by male and female athletes in three-position air rifle competitions, so female and male athletes are able to compete together on an equal basis in the same category.
- **3PAR is a Sport for All.** In addition to being a sports discipline where male and female athletes can compete together equally, it is a sport where skills are developed almost exclusively through practice and where successful athletes are not determined by physical characteristics such as height, weight, strength or speed.
- **Competitors with Disabilities.** The National Council and CMP welcome competitors with disabilities. 3PAR Rules allow many athletes with disabilities to compete in competitions. “Special Authorizations” are issued for other athletes that allow them to use adaptive positions and equipment appropriate to their disability. Special Authorizations describe the positions and accommodations they are allowed to use. Additional information about accommodating athletes with physical impairments is provided in the **NS3PAR Rules**. AR5.1.4

THE 3PAR RULEBOOK

- The official rulebook for junior three-position air rifle shooting in the USA is the ***National Standard Three-Position Air Rifle Rules (NS3PAR Rules)***. The current edition is the 13th Edition 2020-2022 rulebook. Match Officials should always have a copy of the rulebook with them when they work a competition. If you do not have a printed copy of the rulebook, you can download the current rulebook from the CMP website at <https://thecmp.org/youth/air/national-standard-three-position-air-rifle-rules/>. One of the most convenient ways to keep a rulebook with you is to download a copy of the current rules into your cellphone or tablet.
- **Rule References in this Manual.** Instructions and guidelines in this manual are based on the 2020-2022 edition of the ***National Standard Three-Position Air Rifle Rules (NS3PAR Rules)***. The rulebook uses a decimal numbering system to identify each rule and facilitate finding it. References to specific rules will be shown throughout this Manual with their rule numbers (i.e., AR3.4, AR6.2 b), etc.).



3PAR RULEBOOK STRUCTURE

This summary of the 3PAR rulebook structure should help Match Officials become familiar with how to find specific rules for conducting 3PAR events and finals as well as specific rules they need to know to fulfill their responsibilities.

- **Sec. 1.0 General Regulations.** Foundational rules regarding the National Council and governing principles for 3PAR competitions.
- **Sec. 2.0 Safety.** Rules for safe air rifle handling and range procedures.
- **Sec. 3.0 Eligibility to Compete.** Defines basic eligibility and competition categories for individual athletes and teams.
- **Sec. 4.0 Air Rifles and Equipment.** Detailed descriptions of Sporter and Precision Class rifles, clothing and equipment.
- **Sec. 5.0 Competition Conditions.** Rules for the firing positions, courses of fire and range standards.

- **Sec. 6.0 Competition Officials and Their Duties.** Defines the different Match Officials and their responsibilities.
- **Sec. 7.0 Competition Procedures.** Describes the procedures that must be followed in conducting competition firing.
- **Sec. 8.0 Scoring Targets.** Procedures for the manual scoring of paper targets, the use of Orion visual image systems to score paper targets; rules for resolving protests or complaints when electronic targets are used; rules for tie-breaking and ranking.
- **Sec. 9.0 Protests and Appeals.** Describes the procedures athletes and coaches must follow to question or protest competition conditions or Match Official decisions.
- **Sec. 10.0 Finals.** Rules and procedures for conducting standard finals and start-from-zero finals.
- **Sec. 11.0 National Records.** Standards and procedures for recognizing National Records.
- **Appendix A – A “Team Entry and Eligibility Declaration.”**
- **Appendix B – Three-Position Air Rifle for Adults.**
- **Appendix C – National Three-Position Air Rifle Council Programs.** Summarizes programs provided by the Council including match sanctioning, the EIC award program, National Records and a Rules Hotline.
- **Appendix D – Junior EIC Award Program.** Regulations for how EIC credit points that count towards the awarding of the Junior Distinguished Badge (on right) may be earned.
- **Appendix E – Firing Procedures and Range Officer Commands.** Detailed Range Officer instructions and commands in script format.



GUIDELINES FOR SERVING AS A MATCH OFFICIAL

- Your mission as a Match Official is to ensure that participating athletes have fair, enjoyable competitions conducted according to applicable rules and the highest standards of sportsmanship.
- Perform your duties, as defined in the rules and as outlined in this Manual, to the best of your abilities.
- Treat all athletes and coaches with respect and courtesy; no form of discrimination is acceptable. AR1.5.
- Be alert and responsive to all issues or questions that arise within your scope of responsibility.
- Make all decisions according to the rules as they are written; do not invent, disregard or erroneously interpret rules.
- Dress professionally; there should be no political or propaganda messages on your clothing.
- Speak professionally; do not use profanity or include political or propaganda commentary in your speech.
- Match Officials may not coach or show partiality to any athlete or team.
- If you are unsure as to how to act or decide an issue, ask another Match Official to work with you; teamwork is a virtue for Match Officials. If doubt about a rule remains, contact the CMP Competitions Department (competitions@thecmp.org).

In addition to these Guidelines, you are reminded that the personal qualities or attributes of a “Great Match Official” published in the *CMP’s Becoming a Range Officer* (pages 7-8) are: **1) Knowledge, 2) Communication Skills, 3) Empathy, 4) Impartiality, 5) Self-Control and 6) a Positive Attitude.** Your work as a Range Officer or Match Official should always exemplify those attributes.

PREPARING FOR A COMPETITION

When you are invited to serve as a Match Official in a competition, here are some things to do to get ready for the competition:

☐ **Prompt Response.** When invited to serve as a RO, SO, or in any other Match Official position, promptly confirm whether you are available to serve.

☐ **Match Program.** Obtain a copy of the Match Program and become familiar with it: The Program tells you which events and courses of fire will be used.

☐ **Rulebook.** Be sure you have a copy of the current edition of the ***National Standard Three-Position Air Rifle Rules*** to take with you (or upload a copy onto your cell phone or tablet).

☐ **Reporting.** Know where, when (day and time) and to whom you should report after arriving at the range.

☐ **What to Take With You to the Match.** When you depart for the range, be sure you have a copy of the current rulebook (electronic or printed), a copy of the match program, notepad and pen or pencil with you. If you will be working as a Range Officer, you should also take a stopwatch or timer with you.

CHECKING IN AT THE RANGE

Plan to arrive at the range an hour before firing is scheduled to start so you can meet other match officials and prepare for the competition. After arriving at the range, the MD, CRO or CSO will brief Match Officials about the day's program and confirm their specific working assignments.

Range Officer Identification. Match Sponsors should provide a RO vest, visible arm band, hat or other means of identification for any Match Official who will serve as a Range Officer. Athletes and coaches must be able to identify Range Officers.

HELPFUL INFORMATION FOR MATCH OFFICIALS

Here are special instructions and important information that 3PAR Match Officials need to know:

- **Match Official Responsibility.** Match Officials are responsible for safely conducting competitions and for acting to ensure that all participating athletes have fair competitions conducted according to the rules. Officials with “**Match Officer**” status in 3PAR competitions include the Match Director, the CRO and ROs, the CSO and SOs. Match Officials may also include Equipment Control Officers and EST TOs. AR6.0
- **Giving Corrections or Instructions.** When it is necessary to speak with an athlete, follow these guidelines: 1) Do not interrupt an athlete who is attempting to fire a shot unless a dangerous safety situation is involved, 2) approach the athlete on the right side (right-handed athlete) and 3) speak quietly, politely and respectfully.
- **Emergency Stop Situations.** Match Officials must know how to command an Emergency **STOP** if a serious safety or other emergency should occur. An Emergency **STOP** should only be called if there is a real safety emergency (*i.e., someone enters the range in front of an active firing line, someone is seriously injured, etc.*). The first person who sees a safety emergency should call **STOP-STOP-STOP (Repeat STOP 3 times!)**. If an Emergency **STOP** is called, athletes on the firing line must stop attempting to fire, open their rifle actions and stand by for further instructions from the CRO or an RO. AR2.12.
- **Medical or Other Emergency.** If someone on the range is injured or experiences a medical emergency, follow these procedures: 1) a Match Official must go to the injured or affected person to supervise the situation, 2) render first aid as required, 3) if necessary, call 911/Emergency Medical Service (***appropriate emergency numbers must be posted and readily available on the range***) and 4) determine if firing must be STOPPED (see above) until the situation is under control.
- **Spectators.** Spectators, whether they are parents and relatives of athletes or other interested persons, are

encouraged. Try to accommodate spectators by providing seating and an LCD panel or electronic display of ranked results (possible if electronic targets or Orion scoring is used). Spectators should be allowed to talk and even cheer, especially during finals as long as they do not become so loud that they disturb athletes on the firing line. AR7.19.

- **Photography.** Photography should be permitted during competitions, provided that photographers do not step into an athlete's firing point or disturb athletes who are firing. Flash photography is not permitted before or during firing but may be permitted after firing is complete, especially during award ceremonies. AR7.19.
- **Playing Music During Competitions.** Sport presentation techniques that include Announcer or CRO commentary and the playing of appropriate music during preparation, changeover and sighting periods is permitted as a way to enhance the experiences of athletes and spectators. It is important, however, to avoid playing loud music or playing music when commands and instructions are being given. AR7.14.
- **When in Doubt About a Rule.** If you don't know the answer to a rules question or don't know a rule to apply in a particular situation, ask another Match Official to assist you. If no one at your competition site knows the answer to a rules issue, make a decision based on the spirit of the rules and what is fair to the athlete(s) concerned. Competitions Department: 3par@thecmp.org 419-635-2141, ext. 702 or 731. AR1.4.
- **Range Incident Forms (RIF).** Match Officials are encouraged to use RIFs to document issues, problems or irregularities that arise during competitions. RIFs may be used to resolve complaints or protests or to inform other Match Officials about incidents that occurred during the competition. A model RIF Form is printed on page 81 Match Sponsors should copy and print RIFs to give to their Match Officials for use during their competitions. The Orion App also provides an electronic RIF that Match Officials may use.

AIR RIFLE RANGE OPERATIONS

This section provides information on procedures Match Officials who work as CROs or ROs must follow during 3PAR competitions. The first responsibility of Match Officials and Range Officers is always to ensure the safety of everyone on the range.

PREPARING THE RANGE FOR FIRING

Match Officials must take the necessary steps to ensure that the range is safe and ready for match firing. The operation of a safe air rifle range requires paying attention to these requirements:

- ☐ **Range Perimeter Security.** The walls on the sides and front of the range should have no windows or, if there are windows, they should be covered. Access doors on the sides and rear of the range must be secured so that entry during firing is not possible.
- ☐ **Compressed Air/CO₂ Refill Station.** Every air gun range that hosts competitions must have a compressed air and CO₂ refill station. Athletes are expected to bring adapters for their rifles, but ranges must provide refill possibilities for both compressed air and CO₂ gas. Be sure compressed air and CO₂ tanks are secured to a wall or support so they cannot be knocked over.
- ☐ **Target Mounting.** Ranges must have a means of hanging targets at the legal heights (at target center) of 0.5 m (20"), 1.4 m (55") and 0.8 m (31.5"). AR5.5.4.
- ☐ **Target Lighting.** Air gun ranges must have a lighting system that provides a minimum of 800 lux of illumination on the targets. That light level, however, is not adequate; target illumination should be 1500 to 2000 lux. Lighting on all targets must be uniform. Even the light on the firing line should be at least 800 lux so that the athletes are clearly visible. AR5.5.6.
- ☐ **Pellet Capture.** Ranges must have a well-maintained system for capturing all



Athena ESTs facilitate lead removal from targets by capturing fired pellets in plastic bags that can be sealed and disposed of while minimizing lead handling.

shots fired on the range (*pellet trap in or behind target or an open backstop*). The backstop must not bounce pellets back towards the firing line.

- ☐ **Safety Equipment.** Every range must have a procedure for unloading loaded rifles. This may be done by using a PDC (pellet discharge container, see photo) and directing the athletes to fire the loaded rifle into it or by using a .177 cal. cleaning rod to push the pellet out of the barrel.



- ☐ **Range Cleaning & Lead Management.** Ranges used for 3PAR shooting must have a lead management plan that minimizes the contacts athletes, coaches and Match Officials have with lead fragments and dust. Range cleaning that follows established lead management practices must be accomplished before athletes arrive for a competition. Regular floor cleaning, especially on the areas immediately in front of the firing line (*under rifle muzzles*) and under the target backstops where lead fragments accumulate, must be done. The plan must provide for the safe, periodic removal of lead deposits from the pellet traps, by adults. Ranges should follow range cleaning practices described in the ***CMP/USAS Guide to Lead Management for Air Gun Shooting*** (download a copy at <https://thecmp.org/wp-content/uploads/LeadMgtGuide.pdf>).
- ☐ **Toilet and Hand Washing Station.** All ranges should have toilets available for athletes and accompanying adults. There should be a sink or hand washing station where athletes can wash their hands after firing. If a toilet or hand washing station is not readily available, disposable hand wipes must be available for athletes when they leave the firing line.
- ☐ **Firing Point Equipment.** Each firing point on the range may have the following equipment:
 - **Shooting Mat.** Every firing point should be provided with a shooting mat that is approximately 80 cm x 200 cm

(31.5" x 79") and that has a forward portion, which is a maximum of 50 mm (2") thick. If shooting mats are not provided, this must be announced in the Match Program. AR4.7.5.

- **Shooting Table or Bench.** Each firing point may also provide a movable bench or table 0.70-1.00m in height.
- **Chair.** A chair may also be provided for each firing point. If chairs are provided and firing points used for a final, chairs must be removed during finals.

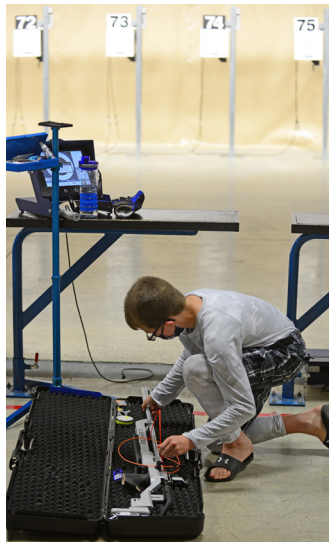
- ☐ **Official Bulletin Board.** An accessible location on the range should be designated as the official bulletin board where results lists and official information bulletins can be posted. AR5.5.8.

SAFE FIRING PROCEDURES

The safety of athletes, coaches, Match Officials and spectators at 3PAR competitions is maintained by following established safe firing procedures. Safety procedures on air rifle ranges include:

- **Basic Safety Rules.** Three "Basic Safety Rules" govern how guns must be handled safely on all air gun ranges and indeed, in all circumstances:
 - 1) **Control the direction the rifle muzzle points**—on a range, muzzles must be pointed upward or downrange towards the targets.
 - 2) **Keep all rifle actions open with CBIs (safety flags) inserted**, except during Preparation and Sighting stages.
 - 3) **Keep fingers off of the trigger until aiming at the target begins.** When handling a rifle, the index finger should remain on or outside of the trigger guard until aiming begins.
- **CBIs/Safety Flags.** A legal CBI (Clear Barrel Indicator) is a length of bright-colored weed trimmer cord that visibly extends out of both the muzzle and breech ends of the barrel when inserted. CBIs confirm that air rifles are unloaded and cannot be fired. CBIs must be inserted in rifles at all times except when they are removed during Preparation & Sighting and Record Fire stages or when rifles are cased. AR2.2.

- **Cleared Rifle.** A CLEARED rifle is a rifle with an open action, no pellet in the barrel (unloaded) and a CBI/Safety Flag inserted in the full length of the barrel. Air rifles must be CLEARED when they arrive on the firing line, when anyone goes downrange and when they leave the firing line. Engaging a safety (*most target air rifles do not have safeties*) is not required to CLEAR a rifle.
- **Cleared or Cased Rifles.** Any air rifle brought to a range must be carried CLEARED (*with an action open and CBI inserted*) or be carried in a closed gun case.
- **Grounded Rifle.** A grounded rifle is a rifle that has been CLEARED (*action open, CBI inserted*) and placed on a bench, shooting mat or floor. A rifle that is being handled by someone is not grounded; to be grounded, the rifle must be placed down.
- **Using Rifle Cases.** When rifles are brought to the firing line in gun cases, cases should be oriented so that when they are opened, rifle muzzles point downrange. Cases are normally opened when athletes are called to the line. The RO will give instructions for placing rifles back in rifle cases at the end of firing, including a command to **DISCHARGE AIR DOWNRANGE** before placing rifles in cases in an uncocked condition. AR2.11.
- **Rifle Carrying on the Range.** When an uncased rifle is carried on the range, it must be CLEARED (action open, CBI inserted) and held with the muzzle pointing up and above the level of the head.
- **Firing Completion.** When a Record Fire stage is completed, athletes must open rifle actions, insert CBIs and ground their rifles.



Rifle cases must be oriented, so muzzles point downrange when cases are opened or closed.

- **Downrange Operations.** Any time it is necessary for someone to go downrange (*ahead of the firing line*) for target handling, target servicing or any other purpose, all rifles on the firing line must be CLEARED and grounded or placed in closed gun cases. AR2.9.
- **Personal Hygiene.** Since 3PAR shooting involves handling lead pellets, 3PAR athletes must wash their hands after they finish firing. If a bathroom is not readily available, disposable hand wipes should be available for hand cleaning. Air gun range hygiene also mandates that no food be consumed on ranges and that all beverage containers be closed. AR2.13.2.
- **Responding to IS THE LINE CLEAR Questions.** During the conduct of firing on ranges with more than one RO, the CRO will ask **IS THE LINE CLEAR?** When this question is asked, each RO must check the athletes in their sector to confirm compliance and then signal YES or NO to the CRO. This may be done with red/NO – green/YES signal paddle or with hand signals (hand pointed downrange = YES, hand pointed to rear = NO).
- **When Eye Protection is Necessary.** If Match Officials determine that on a particular range, there is a danger of pellet fragments ricocheting back to the firing line, they may require that all personnel on the firing line wear eye protection. If eye protection is required, this must be announced before a competition in the Match Program and in the Safety Briefing. AR2.13.1.

MATCH FIRING STAGE SEQUENCE

The correct conduct of 3PAR competition firing follows a standard match firing stage sequence (see chart below). Be familiar with this sequence—it controls the conduct of all 3PAR competitions.

3PAR MATCH FIRING STAGE SEQUENCE 5.3		
Step	Stage	Notes
1	Safety Briefing	Safety instructions are given to all athletes and coaches before the 1st relay is called to the line.
2a	Call to the Line	Athletes are instructed to place their equipment on their firing points. If targets are already hung, they may continue with pre-preparation.
2b	Target Hanging (if required)	Rifles must remain cased or be grounded before anyone goes downrange.
3	Pre-Preparation	5 min. minimum. Athletes may uncase their rifles and set up their equipment, rifle handling is authorized; athletes may get into the prone position; CBIs must remain in rifles. AR5.3.1 b).
4	Preparation and Sighting Time (Prone)	8 min. CBI removal and dry firing is authorized; athletes may fire unlimited sighting shots. AR 5.3.1 c). Coaching is permitted for Sporter Class athletes. AR5.2.1.
5	Record Firing Time (Prone)	10 or 20 min. Firing is authorized by the commands: LOAD...START* . Firing is stopped by the commands: STOP...UNLOAD* after which, rifles must be cleared and CBIs inserted.
6	Target Changing or Maintenance	Fired targets may be retrieved and replaced if required; EST maintenance may be done if required (mask replacement).

7	Changeover (Standing)	5 min. Athletes may handle their rifles and change to the standing position. CBIs may be removed after athletes are in position. 5.3.1 c).
8	Sighting Time (Standing)	5 min. CBI removal, dry firing, loading and firing is authorized; athletes fire unlimited sighting shots.
9	Record Firing Time (Standing)	15 or 25 min. Firing is authorized by the commands: LOAD...START* . Firing is stopped by the commands: STOP...UNLOAD* after which, rifles must be cleared and CBIs inserted.
10	Target Changing or Maintenance	Fired targets may be retrieved and replaced if required; EST maintenance may be done if required (mask replacement).
11	Changeover (Kneeling)	5 min. Athletes may handle their rifles and change to the standing position. CBIs may be removed after athletes are in position. 5.3.1 c).
12	Sighting Time (Kneeling)	5 min. CBI removal and dry firing is authorized; athletes may fire unlimited sighting shots.
13	Record Firing Time (Kneeling)	15 or 25 min. Firing is authorized by the commands: LOAD...START* . Firing is stopped by the commands: STOP...UNLOAD* after which, rifles must be cleared and CBIs inserted.
14	Clearing the Line	CRO will authorize athletes to discharge air downrange; athletes may case their rifles and remove equipment from the line.
15	Target Changing or Maintenance	Fired targets must be retrieved; electronic target maintenance may be done if required (mask repair).
16	Calling Next Relay to Line	Each successive relay repeats this sequence starting at Step 2.

**Firing on Athena electronic targets may be controlled with Red-Green signal lights mounted on the targets. If this system is used, athletes and coaches must be informed during the Safety Briefing. AR2.5.*

Transitions from Sighting to Record Fire. At the end of the Preparation and Sighting or Sighting time for each position, a **SIGHTING SHOTS...STOP** command is given to announce that the Sighting Time has ended. The **STOP** command is given because with electronic targets it is necessary to pause long enough to change all targets from Sighting to Match. There is no requirement to CLEAR rifles at this point, however. If an athlete has a loaded rifle at the end of the Preparation and Sighting or Sighting time, they do not need to CLEAR their rifles. Instruct them to standby; the commands to start Record Fire will begin momentarily.

Firing Procedures for 3x20 Matches when only one target can be hung. If a 3x20 match is conducted on a range with target holders that hold only one target, this requires these procedures to be modified to provide for two separate Record Fire times for each position. Use the 10-shot time limits for each Record Fire time. Rifles must be cleared and grounded for each target change. After the second targets for a position are hung, a new Changeover time is not necessary but a shorter two (2) minute Preparation and Sighting time must be given before starting the second Record Fire time for each position.

RANGE OFFICER SCRIPTS

The **NS3PAR Rules** (Appendix E, pages 65-89) provide detailed RO scripts with authorized standard range commands and instructions that ROs should use in conducting range firing for the following:

- o Three-Position (3x10 & 3x20) Course of Fire
- o Standing Position (40- or 60-Shot) Course of Fire
- o Three-Position (3x10 or 3x20) Course of Fire on Ranges with Automated Procedures (*Ranges with Athena EST*)
- o Standard Final (3x10 or 3x20 + 10 shots)
- o ISSF Standing Position Final (24 shots Start-from-Zero)
- o ISSF Three-Position Final (45 Shots Start-from-Zero)

STANDARD RANGE COMMANDS

Range firing is controlled by using Standard Range Commands. Range Commands are generally self-explanatory but there are specific rules governing what those commands mean:

- **LOAD.** No athlete may bring a pellet into contact with their rifle until the command **LOAD** is given (placing a pellet on the loading port is loading). After a **LOAD** command, athletes may insert pellets and close rifle actions, but they may not start firing. AR2.4.
- **START.** **START** authorizes athletes to **LOAD** (*if that command has not already been given*) and to start firing. Athletes may continue firing until they complete a firing stage, or the **STOP** command is given. AR2.5
- **STOP.** All firing or attempts to fire must cease when the **STOP** command is given. AR2.7.
- **UNLOAD.** The **STOP** command is normally given in conjunction with the **UNLOAD** command. If an **UNLOAD** command is given and an athlete has a pellet in their rifle barrel, they must notify the RO that they have a “*loaded rifle.*” The RO must supervise the unloading of the rifle, which may be done by directing the athlete to discharge the rifle into a pellet discharge container (PDC) or inserting a .177 cal. cleaning rod in the muzzle to push the pellet out of the breech end of the barrel. AR2.8.

A SAFETY BRIEFING FOR ATHLETES AND COACHES

Before firing in a competition starts, the CRO or another Match Official must give a **Safety Briefing** to all participating athletes and coaches. The **Safety Briefing** should include these items (*adaptations may be made*):

1. *A CBI (clear barrel indicator or safety flag) must be inserted in the barrels of all uncased rifles at all times, except during Preparation & Sighting, Sighting and Record Fire times. During Changeover times CBIs may be removed after you are in a firing position.*
2. *Keep rifles pointed in safe directions at all times. If you are on the firing line, keep rifle muzzles pointed up or downrange toward the targets. If you are not on the firing line, keep rifle muzzles pointed up, with muzzles held above head level.*
3. *If targets are already in place:*
You may uncase and handle rifles after you are called to the firing line, but you may not remove CBIs or close rifle actions until the Preparation & Sighting period starts;
or If targets are to be hung by competitors or coaches:
*After you are called to the firing line, place your rifle case or **CLEARED** rifle on your firing point and wait for instructions from the Range Officer before going downrange to hang targets.*
4. *Do not load your rifles until the command **LOAD** or **START** is given. Do not fire a shot until the command **START** is given.*
5. *When the command **STOP** is given, all attempts to fire a shot must stop immediately.*
6. *When you finish firing a stage of fire in any position, open your rifle action and insert a CBI before you put your rifle down.*
7. *When the command **UNLOAD** is given, you must **CLEAR** your rifle by opening the rifle action, inserting a CBI, and grounding the rifle by placing it down on the firing point with*

*the muzzle pointing downrange toward the targets. If the command **STOP—UNLOAD** is given and your rifle is loaded, raise your hand, remain in position and wait for instructions from a Range Officer.*

8. *Do not remove your rifle from the firing line until a Range Officer has checked it to confirm that it is **CLEARED**, with a CBI inserted.*
9. *If you have a problem, remain in position, keep your muzzle pointed downrange and raise your hand; a Range Officer will assist you.*
10. *Electronic communication devices are not allowed on the firing line. Timers that make audible sounds are not permitted. Any cell phone that is used as a timer must be placed in airplane mode.*

RO ACTIONS BEFORE FIRING STARTS

During the 5-minute pre-prep period before a Preparation and Sighting time, ROs actions in their sector of the firing line should include the following:

- ☐ Before athletes are called to the line, check to be sure everything is in order, that targets or target holders are in place, shooting mats are on each firing point and the firing points are clean.
- ☐ Many athletes bring their rifles to the line in gun cases. As soon as they reach the line, and if targets are already hung, they may open their gun cases and remove their rifles from their cases (cases should be oriented so muzzles point downrange when they come out of their cases). When rifles are removed from their cases, rifle actions must immediately be opened, and CBIs inserted. AR7.4.
- ☐ If athletes and/or their coaches will hang their own targets, then when athletes are called to the firing line, athletes must ground **CLEARED** rifles on their firing points or leave gun cases unopened. The CRO will confirm that the line is **CLEAR** and then announce when they may go downrange to hang targets for the prone stage.
- ☐ After anyone goes downrange to hang or retrieve paper targets or service electronic targets, ROs must confirm that

everyone is back from downrange before the CRO begins the 5-minute pre-prep period, or the Changeover time for subsequent positions, when athletes are authorized to open their gun cases, handle their rifles and begin preparations for firing.

- ☐ If you have a Start List (Squadding List), confirm that all competitors are present and on their assigned firing points. If there is no Start List, it is especially important that all targets be labeled so they can be linked to the athletes who fire them.
- ☐ If equipment control testing was conducted and athletes have equipment control forms, confirm that the athletes have their completed equipment control forms with them. AR7.3.3.
- ☐ During the 5-min. pre-prep period, athletes may set up their equipment, handle their rifles and get into their prone positions. They may do aiming exercises, but they may not remove CBIs or dry fire. AR7.5.
- ☐ Be familiar with the different modes of aiming and firing and when they are permitted or not permitted. AR7.12. The table (below) explains the different modes of aiming and firing:

AIR RIFLE AIMING AND FIRING MODES		
Aiming Exercises	Aiming, with no trigger release	<u>Permitted during Pre-Prep and Changeover times</u> , with CBI inserted; <u>permitted in Finals</u> between shots; action must remain open.
Dry Firing	Aiming and releasing a cocked trigger with no discharge of gas	<u>Permitted during Preparation & Sighting and Record Fire times</u> , if the air rifle allows dry firing without discharging gas.
Gas Discharge	Release of a cocked trigger with discharge of gas and no pellet in the barrel	<u>Permitted only during Preparation & Sighting times</u> ; gas discharge during Record Fire times is prohibited.

Firing Shot	Releasing cocked trigger, with pellet in barrel and discharge of gas	<u>Permitted during Sighting and Record Fire times.</u>
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RO ACTIONS DURING PREPARATION AND SIGHTING

In 3PAR competitions, Sighting and Record Fire stages are separate. After the 5-minute pre-prep time, there is an 8-minute Preparation and Sighting time before the prone position Record Fire stage. After the prone and standing position Record Fire stages, there are 5-minute Changeover and 5-minute Sighting times before the standing and kneeling Record Fire stages. Loading and firing is authorized during both Sighting and Record Fire stages. RO responsibilities during these periods include:

- **Safety Flags.** CBIs must remain in rifles during the pre-prep stage but may be removed after the Preparation and Sighting time begins. AR7.5. During Changeover times, athletes may remove CBIs after they are in position. AR2.2.
- **Monitor Loading.** At the end of the pre-prep and Changeover times, the CRO will announce the stage of fire and authorize firing with the command **START**. No one may bring a pellet into contact with the rifle until a **LOAD** or **START** command is given. AR2.4.
- **Misplaced Sighting Shots.** 10m air rifle paper targets have two sighter bulls in the center of the target and a guard ring printed around the two sighter bulls. Athletes should report any sighting shots outside of the guard ring. ROs may use spotting scopes to identify shots outside of the guard ring so that they can be marked and nullified when targets are retrieved. All shots outside of the sighter guard ring that are not marked by the RO as misplaced sighting shots must be scored as record shots. AR7.15.4.
- **Malfunctions.** Malfunctions can occur anytime, including during sighting shots. ROs should be familiar with how to load and fire popular Sporter air rifles that are used in 3PAR events because many malfunction claims are actually failures to fully cock or close rifle actions or keep safeties disengaged. AR7.17

- **Late Arrival.** An athlete who arrives late may be permitted to fire, but no additional time is authorized unless their delayed arrival was not the fault of the athlete. If the delay was not the fault of the athlete, they may be resquadded or given additional time. AR7.18.

RO ACTIONS DURING RECORD FIRE

In 3PAR competitions, Record Fire for prone, standing and kneeling follows Sighting periods. During Record Fire, there are many issues or problems that may occur. ROs are responsible for handling these issues or problems in accordance with the NS3PAR Rules. The table (below) lists issues ROs need to be prepared to resolve. Issues are listed in alphabetical order. When handling these issues, RO should use RIFs to document them and how they were resolved.

ISSUE RESOLUTION ON THE RANGE	
ISSUE	ACTIONS TO TAKE:
Athlete asks to leave firing line	If an athlete wishes to leave the firing line for any reason (<i>to speak to a coach, go to the bathroom, etc.</i>) they must CLEAR and ground their rifle, <u>obtain RO permission</u> and then step back from the line without disturbing other athletes. When athletes finish firing they may leave the firing line if they CLEAR their rifles and <u>obtain RO permission</u> , but they may not remove their equipment from the line until all firing is complete. AR7.10.
Crossfired Shot	If an athlete crossfires a shot onto the target of another athlete or onto a target for another position during a Record Fire stage, the athlete who crossfired must be scored a miss for that shot. The crossfired shot must be nullified on the target of the athlete who received the crossfire. There is no penalty for a crossfired sighting shot. AR7.15.9.

Cylinder Replacement	If an athlete asks to replace a cylinder during a firing time, they may do so <u>with RO permission</u> , but no extra time is allowed. They must insert a CBI and remove their rifle from the firing line to replace or refill a cylinder. AR7.17.5. Most athletes plan their cylinder refills so that this is done during Target Maintenance or Changeover times. This is permitted if the rifle is CLEARED before it is removed from the firing line.
Disputed Shot	An athlete who claims that a shot on their target was not fired by them must immediately notify a RO. The RO can nullify a disputed shot if they confirm that the athlete did not fire the disputed shot (<i>mark the shot and complete an RIF</i>). AR7.15.11
Early Shot, shot fired before START	A shot fired before START for a Preparation & Sighting or Sighting stage must be scored as a miss (0) on the first competition shot. AR7.15.1.
Improper Loading, double loading	Loading two pellets at one time or failing to properly close the bolt/action after loading are not malfunctions. If an athlete thinks they have loaded two pellets, they may ask the RO for assistance. ROs may instruct them to fire the pellets into a pellet discharge container (PDC) or use a cleaning rod to push the pellets out of the breech. AR715.10
Improper Loading, two shots fired	If an athlete mistakenly loads and fires two pellets at one time, they must notify the RO. The lowest value shot must be nullified; the highest value shot must be scored and counted (<i>mark the shots and complete an RIF</i>). AR7.15.10.
Interruption, for one athlete or the entire range	Start a timer. Confirm that the interruption is not the fault of the athlete(s) and take corrective action. If the interruption is less than 5-min., award additional time equal to the time lost. If the interruption is more than 5-min., award additional time equal to the amount lost and authorize additional unlimited sighters plus 2 additional minutes. AR7.16.

Late Shot, shot fired after STOP	A shot fired after STOP at the end of a Sighting stage and before the START command for a Record Fire stage receives a 2-point penalty on the first record bull. A shot fired after STOP at the end of a Record Fire stage must be scored as a miss (0). AR7.15.2.
Late Shot(s), shots not fired	Any Record Fire shot(s) not fired within the time limit must be scored as a miss(es) (0). AR7.15.6.
Low Gas Pressure	If an athlete's rifle develops low gas pressure because it was not properly charged before the stage of fire began, the athlete may CLEAR their rifle, get RO permission and take the rifle off the line to be recharged. No extra time is authorized for doing this. AR7.17.2.
Malfunction of rifle, ammunition or equipment	If an athlete has a malfunction and needs assistance, they must notify the RO. A coach may assist in repairing or replacing a rifle (replacement requires RO permission). No additional time may be awarded for malfunctions unless they occur in the last five minutes of a Record Fire stage. If a rifle is replaced, the RO may authorize the athlete to fire additional Sighting shots, but no extra time is authorized. For malfunctions that occur during the last five minutes, the RO may authorize two additional minutes of firing time (<i>be sure to notify the CRO</i>). AR7.17.1.
Release of Propelling Charge	This is the discharge of gas by pulling the trigger on a cocked rifle that does not have a pellet loaded in it. If this is done during a Record Fire stage, each discharge of gas without a pellet must be scored as a fired shot (miss = 0). The discharge of gas during Sighting times is permitted. AR7.12; AR7.16.2.
Safety violation	If anyone is handling a rifle in an unsafe manner (<i>rifle with no CBI, careless muzzle control, etc.</i>), give them a polite reminder to correct the fault. AR2.14.

Sighting Shots fired during Record Fire	Any shot fired on the sighting bull during match firing time must be scored as a miss (0). However, this is difficult to detect unless the RO is observing the target with a spotting scope when the shot is fired. AR7.13.1.
Shots Fired When a Malfunction Occurs	A shot fired with low gas pressure is the athlete's responsibility and is not a malfunction. However, if a gas leak (<i>due to a broken seal, etc.</i>) should occur when a shot is fired, that shot may be nullified and refired. Inspection of the rifle by a qualified expert may be required to confirm this. See Rule 7.17.4 for further details.
Two Shots, on one bull	If an athlete fires two shots on one bull, there is no penalty for the first two times this occurs, <u>IF</u> the athlete leaves one (or two) subsequent bulls open (<i>unfired</i>) in the same position. Apply a 2-point penalty for the third and subsequent occurrences in the complete 3PAR course of fire. AR7.15.7.
Unchecked Rifle	If rifle or clothing inspections are conducted before the match starts, athletes should come to the firing line with an equipment control form or other evidence that their equipment was inspected. If an athlete has equipment that was not inspected, notify the Equipment Control Officer to check the athlete's equipment after their relay is finished. Scores fired with equipment that does not pass a post-competition check must be disqualified. AR7.3.
Unclaimed shot on target	Check adjacent targets for a missing shot (crossfire). If confirmed, nullify the unclaimed shot; score the athlete who fired the crossfire with a miss (0). AR7.15.11. <i>Note: Crossfires on paper targets are very difficult to confirm unless the athlete who fired the crossfire admits doing so. A skilled TO can usually detect crossfires fired on EST.</i>

COACHING

Certain types of coaching are permitted where coaches may have direct contact with athletes during competitions. Rules concerning coaching provide for the following:

- Coaching is permitted during Sporter Class Preparation and Sighting, Changeover and Sighting stages. Coaching during Record Fire is not permitted. AR5.2.1.
- Non-verbal coaching is permitted during all stages of Sporter or Precision events. Coaches may not speak to an athlete or use electronic communications, but they may use hand signals provided those actions do not disturb other athletes. AR5.2.2.
- During Sighting or Record Fire stages, an athlete may ask an RO for permission to step back from the firing line to speak with their coach. The athlete must CLEAR their rifle before leaving their firing point.
- During Sighting or Record Fire stages, a coach may ask an RO to inform an athlete that they wish to speak with an athlete on the firing line. The RO must notify the athlete who must CLEAR their rifle and step to the rear of the firing line to speak with the coach.
- Other forms of coaching are not permitted. Coaching during finals is explicitly prohibited, except in three-position finals. Coaching during Changeover times is permitted.



Modern air gun ranges should, if possible, have a staging area or waiting room where athletes, coaches and visitors can rest, eat snacks or wait for their relay to be called to the line. Having a nearby dressing room is a special convenience.

RO ACTIONS AFTER RECORD FIRE


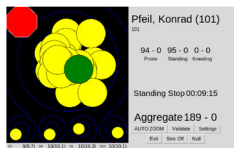
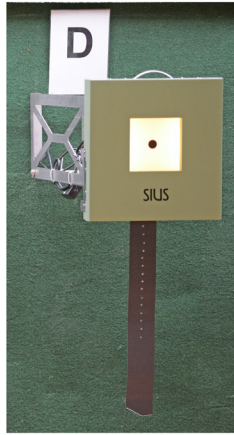
ROs must also monitor activities that take place after a Record Fire stage is completed or after all three Record Fire stages are completed:

- ☐ **Firing Stage Completed.** When an athlete completes a stage of fire, they must **CLEAR** their rifles. They may place **CLEARED** rifles down and request permission from the RO to leave the firing line.
- ☐ **Target Changing (paper targets).** If two targets are hung, it will be necessary to **CLEAR** the firing line and send target changers downrange to change targets after each position. When athletes finish firing a Record Fire stage, they must **CLEAR** and ground their rifles. As athletes finish firing, the RO should check their rifles so that when the **STOP** command is given, **CLEARING** the line can be done quickly. As soon as the line is **CLEARED**, the CRO will instruct target changers to go downrange and change targets. A Match Official should take all fired targets as quickly as possible.
- ☐ **Cylinder Refilling.** Not all air rifle cylinders hold enough gas to complete a 60-shot course of fire with sighters. In these cases, athletes will want to take their rifles or gas cylinders to the refill station. To do this, rifles must be **CLEARED**, and athletes must request permission from the RO to take rifles or cylinders off of the firing line. AR7.17.5.
- ☐ **Last Stage Completion.** When athletes complete their kneeling (last) stage, they must **CLEAR** their rifles. They may place **CLEARED** rifles down and step back from the firing line, but they may not remove their equipment from the firing line until all firing is finished and the CRO has **CLEARED** the line.
- ☐ **Removing Equipment from the Line.** After **CLEARING** the line, the CRO will tell athletes they may **RELEASE AIR DOWNRANGE**. Athletes may then remove CBIs, close rifle actions, pull triggers to release gas, place their rifles back in rifle cases and remove them from the line. The CRO will then authorize athletes to remove their equipment from the firing line.
- ☐ **Target Retrieval or Servicing.** After rifles are removed from the line, the CRO will authorize target handlers to retrieve fired targets or the servicing of electronic targets.

ELECTRONIC TARGET OPERATIONS

The checklists and instructions in this section are provided for ROs and EST TOs who serve during competitions on ranges where electronic targets are used.

Approved EST. The most common 10m ESTs now used in 3PAR competitions are targets manufactured by Athena (Orion), KTS (Kongsberg), Megalink and Sius AG. How protests or complaints are resolved depends upon which target system is being used. The first step in working on a range with electronic targets is to identify the target manufacturer. AR8.1.2.

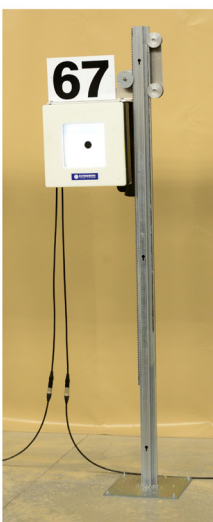
10 m ELECTRONIC TARGETS

All electronic targets offer technical training programs for the TOs who operate their target systems. Match sponsors must make sure their TOs take advantage of this training and have opportunities to practice operating these target systems before competitions.

On left:
Athena target: USA
 With athlete monitor,
 START/STOP
 signal lights;
 VIS scoring;
 With paper roll

On right:
KTS-Disag: Norway
 Optical scoring
 With 3-position
 elevator;
 no witness strip

On left:
Sius AG: Switzerland
 Optical/laser scoring
 With paper roll
 witness strip



How ESTs Score. Electronic targets score shots by measuring the distance (radius) between the electronic center of the target and the center of a pellet at the point where it hits the target (shot hole). ESTs determine x and y coordinates for each shot relative to the center of the target that describe and display precise shot locations. AR8.4.

Types of ESTs. There are three different types of electronic targets: 1) **acoustical** (*microphones in the four corners of the target time sound waves produced when the pellet strikes the target*); 2) **optical/laser** (*use arrays of light or laser beams that register where a pellet breaks those beams*) and 3) **Visual Image** (*a camera creates an image of each new shot hole that is analyzed by VIS software to score and register the shot*).

Score Recording. EST scores produced on the range are final and are not subject to change unless they are protested in accordance with Rule 8.4. ESTs should be integrated with an MMS so that all scores determined by targets are entered into the MMS. If electronic targets are not linked to an MMS, scores produced by the targets must be manually entered into the MMS. AR8.4.

EST Technical Officers (TO). Any range with EST should have one or more Match Officials who are designated as TO(s). The TO operates the main computer and targets and works with the RO(s) to resolve issues, protests and complaints that arise during the competition.

Decisions Regarding Protests or Complaints. The TO and RO work together to decide protests and complaints. Decisions by the TO and RO regarding protested shots or complaints are final and may not be appealed. AR8.4.2 d).

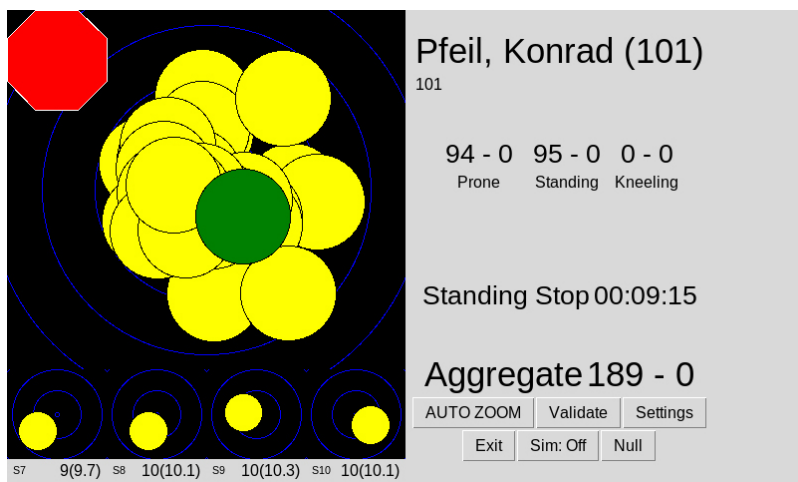
Target Preparation and Maintenance. The scoring accuracy and performance of electronic targets requires that they be properly cleaned and maintained. Procedures to follow in preparing targets for competitions are:

- ☐ Before competitions, targets must be cleaned and any pellet marks on target frames must be repainted or covered. All targets must have clean aiming masks at the start of each relay.

- ☐ With Athena and acoustical systems, the back aiming mask (*backing or sound chamber mask*) must be replaced before the start of each relay.
- ☐ Aiming masks with shot holes should be replaced between stages of fire if shot holes on a mask compromise an athlete's ability to aim.
- ☐ For targets that use paper rolls, the paper rolls must be checked to be sure they have sufficient unused paper to complete the next relay.

Manual Corrections. In order to ensure that all corrections or penalties are included in the final results, the TO must manually enter any corrected scores or penalties that result from decisions made by the TO and RO in the main computer. When manual corrections are made, the athlete and coach must be informed. TOs should keep logs of all manual entries or changes that are made during competitions.

Athlete Monitors. Every firing point must have an individual firing point monitor. The athlete may move the monitor to any location on their firing point so they can see their shots and scores while they are firing. Athletes may not cover their monitors while they are firing because the RO must also be able to see the athlete monitors.



The Athena electronic target athlete monitor.

EST PROTEST OR COMPLAINT RESOLUTION

The checklists on this and the following pages describe steps to be taken to resolve EST issues, protests or complaints:

EST: Protested Shot Value 8.4.2 c)

If an athlete feels that a score registered on their monitor is incorrect, they may protest the score of that shot. Take these steps to resolve the protest:

1. **Confirm the protest:** If another shot has been fired after the protested shot, or if the protested shot is a 9.5 or higher, the score may not be protested. If KTS targets are used, only shots with values of 1, 2, 3, 4 or 0 may be protested.

If the protest can be accepted, then:

2. **If Athena targets are used, do not direct the firing of an extra shot.** The athlete and RO may view the location of a questioned shot on the athlete's monitor by pressing VALIDATE on the monitor. Pressing VALIDATE will display the image of the last shot fired. If the athlete then wishes to protest the score, the RO and TO must examine the shot in the main computer (Orion MMS). If they determine that the protested shot is scored within two (2) decimal rings of the original indicated value, the protest must be denied (ISSF Rule 6.16.5.2 b).
 - a. If the shot was scored incorrectly (*if a correction of more than 2 decimal rings was required*), make a manual correction in the main computer (Orion MMS).
 - b. If the shot was scored correctly (*within 2 decimal rings of the indicated value*), assign a 2-point penalty to the protested shot.
3. If Athena targets are used, and a frame hit ("FH") is indicated and there is no evidence of a frame hit (*frame hits are rare but may occur when a shot perfectly doubles a shot hole already in the paper tape*), the RO may ask the TO to nullify the frame hit and instruct the athlete to refire the shot.
4. If KTS or other targets without witness strips are used, do not direct the firing of an extra shot. The TO and RO must obtain the target mask at the end of the stage of fire, identify the protested shot (*must have been scored a 4 or lower*) and

SCORING PROTESTED SHOTS IN KTS TARGET MASKS

***If the edge of the shot hole
cuts the edge of the mask
by 2.25 mm or less = 4***

***If the radial distance from
the edge of the mask to
the shot hole center is:***

4.50mm – 2.26mm = 3

7.00mm – 4.51mm = 2

9.50mm – 7.01 mm = 1

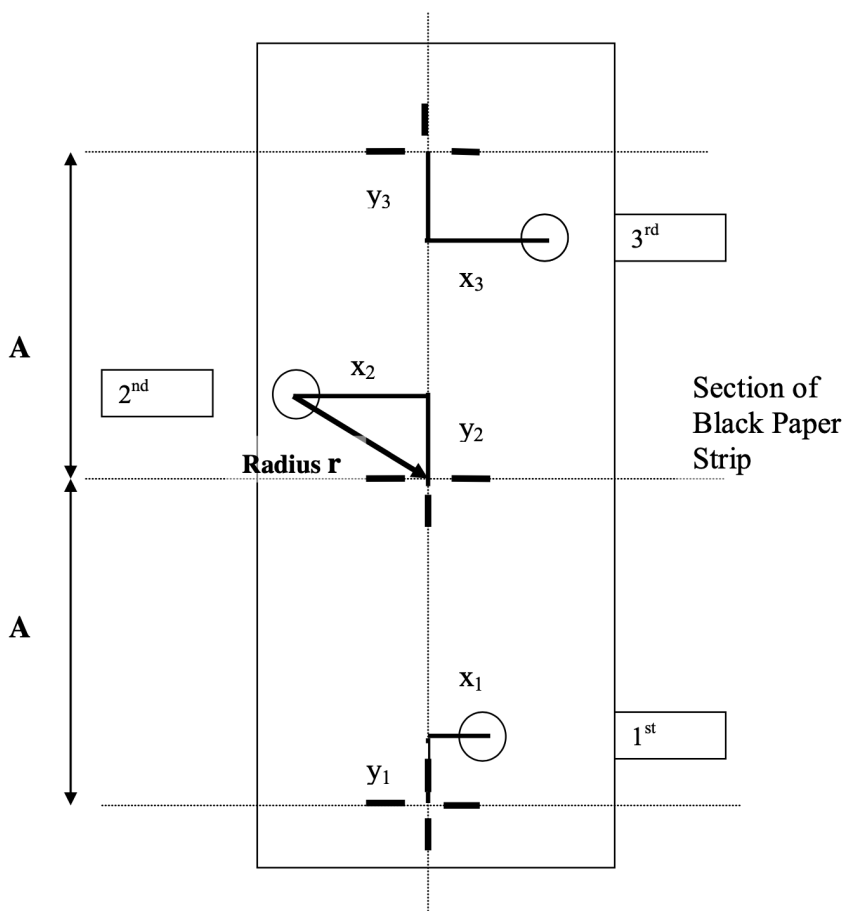
>9.50mm = 0

decide if it was scored correctly. Do this by measuring the radial distance from the edge of the mask to the center of the protested shot hole, then use the table (*on left*) to decide the score for that shot:

- a. If the shot was scored incorrectly, decide the score; make a manual correction.
- b. If the shot was scored correctly, assign a 2-point penalty.

5. If other EST with witness strips (paper strips) are used, direct the athlete to continue Record Fire and to fire one extra shot at the end of the stage (*shot #11 or #21*). The TO and RO must obtain the witness strip at the end of the stage of fire and use the x & y coordinates of the protested shot and shots before and after that shot to determine if the shot was scored correctly (*see diagram on the next page*).
 - a. If the shot was scored incorrectly, score the shot and make a manual correction.
 - b. If the shot was scored incorrectly but cannot be scored, nullify the protested shot and count the extra shot.
 - c. If the shot was scored correctly, apply a 2-point penalty.

10m Plotting of Electronic Centres from x & y co-ordinates



This diagram shows how to use the x/y coordinates of the shots before and after a protested or unregistered shot to determine the electronic centers of those shots and the protested shot. After plotting the electronic centers, measure the radius (*electronic center to shot center*) of the protested shot and determine if it was scored correctly (*Use the radius of the protested shot and the chart on the next page to determine the score*). *Note: This method of checking protested shots should not be used with the paper strips from Athena Targets. The Athena paper strip can be used to confirm that a shot was fired but cannot be used to score that shot.*

10m Air Rifle Scoring Ring Radii

Scoring Ring Radii are given in mm

Score	Radius	Score	Radius	Score	Radius	Score	Radius	Score	Radius
10.9	0.25	8.9	5.25	6.9	10.25	4.9	15.25	2.9	20.25
10.8	0.50	8.8	5.50	6.8	10.50	4.8	15.50	2.8	20.50
10.7	0.75	8.7	5.75	6.7	10.75	4.7	15.75	2.7	20.75
10.6	1.00	8.6	6.00	6.6	11.00	4.6	16.00	2.6	21.00
10.5	1.25	8.5	6.25	6.5	11.25	4.5	16.25	2.5	21.25
10.4	1.50	8.4	6.50	6.4	11.50	4.4	16.50	2.4	21.50
10.3	1.75	8.3	6.75	6.3	11.75	4.3	16.75	2.3	21.75
10.2	2.00	8.2	7.00	6.2	12.00	4.2	17.00	2.2	22.00
10.1	2.25	8.1	7.25	6.1	12.25	4.1	17.25	2.1	22.25
10.0	2.50	8.0	7.50	6.0	12.50	4.0	17.50	2.0	22.50
9.9	2.75	7.9	7.75	5.9	12.75	3.9	17.75	1.9	22.75
9.8	3.00	7.8	8.00	5.8	13.0	3.8	18.00	1.8	23.00
9.7	3.25	7.7	8.25	5.7	13.25	3.7	18.25	1.7	23.25
9.6	3.50	7.6	8.50	5.6	13.50	3.6	18.50	1.6	23.50
9.5	3.75	7.5	8.75	5.5	13.75	3.5	18.75	1.5	23.75
9.4	4.00	7.4	9.00	5.4	14.00	3.4	19.00	1.4	24.00
9.3	4.25	7.3	9.25	5.3	14.25	3.3	19.25	1.3	24.25
9.2	4.50	7.2	9.50	5.2	14.50	3.2	19.50	1.2	24.50
9.1	4.75	7.1	9.75	5.1	14.75	3.1	19.75	1.1	24.75
9.0	5.00	7.0	10.00	5.0	15.00	3.0	20.00	1.0	25.00

To use this chart, you must know the radius (distance in millimeters from the center of the target to the center of the shot hole. Precise measurements and calculations are required to determine if a protested shot has been scored correctly.

EST: Missing Shot 8.4.2 a)

If an athlete fires a shot that does not register (display) on their monitor, take these steps to resolve the complaint:

1. If Athena targets are used, and an athlete complains that a shot did not register, direct the athlete to fire one extra shot at the end of the stage. *Note: It is possible in certain circumstances where there are shot holes in the aiming mask to have a shot hitting the edge of the aiming circle that does not register.* After that stage, the RO and TO must obtain the paper strip and examine it to determine if the missing shot hit the target. Do this by counting the shot holes in the paper strip *(there will be an open space on the paper strip where the stage with the questioned missing shot started).*
 - a. If the shot hit the target, there will be a shot hole in the paper strip where the missing shot should be; nullify the missing shot and count the extra shot.

- b. If there is no shot hole in the paper strip or mask where the missing shot should be, score the missing shot as a miss (0) and nullify the extra shot.
2. If KTS targets or targets without witness strips are used, the RO must confirm that the athlete actually fired a shot and that there is no possibility that the athlete fired an off-target miss or crossfire. If the RO concludes that the athlete fired a shot at their target, direct the athlete to fire another Record Shot. AR8.4.3.
 - a. If the shot registers, count the replacement shot and direct the athlete to continue Record Firing.
 - b. If the replacement shot does not register, nullify the missing shot and the replacement shot and move the athlete to another target.
3. If other EST with witness strips (*paper strip*) are used, direct the athlete to fire another Record Shot. If the shot registers, direct the athlete to continue firing to complete the stage of fire. At the end of the stage, the TO and RO must obtain the witness strip and determine if the missing shot hit the target.
 - a. If the shot is found and can be scored (*use the plotting technique described on page 38*), count that shot and nullify the last (*now extra*) shot. If the shot is found but cannot be scored, count the extra shot.
 - b. If the missing shot is not found on the witness strip, score the missing shot as a miss (0) and nullify the extra shot.
 - c. If the replacement shot did not register, nullify the missing shot and the replacement shot and move the athlete to another target.

EST: Erroneous Scoring 8.4.2 b

If other EST with witness strips are used and a competitor complains that their target is scoring erratically or has registered an unexpected miss, this is usually due to the paper roll in the target not advancing correctly (often due to improper installation). Take these steps to resolve the complaint:

1. Visually check the athlete's target to confirm whether the paper roll is advancing. If the paper roll is not advancing, the paper strip coming out of the bottom of the target will be shorter than normal or may not be coming out at all. You can

also use a spotting scope or binoculars to check. If several shots have been fired, there may be an enlarged hole in the target.

If the paper roll is not advancing:

2. Move the athlete to another firing point or reschedule when the athlete can complete firing after the target and paper roll are repaired.
3. If the athlete is moved to another firing point or rescheduled to complete the series, estimate the number of shots that were scored correctly and the number of shots that were scored incorrectly to determine how many shots the athlete must fire to complete the stage of fire. Instruct the athlete to complete the stage of fire. When an athlete must be moved to another target, allow two (2) additional minutes of time and unlimited sighting shots according to AR7.16.3.
4. After the stage of fire is complete, examine the paper strip to precisely determine how many shots were scored correctly (*equal to the number of shots that appear as single shots on the strip plus one*) to determine how many shots to count in the athlete's score.

If EST with optical/laser scoring are used, it is possible for the aiming mask to be improperly installed so that it causes erroneous scoring. It is also possible for an insect to fly through the optical/laser array and cause an erroneous score.

EST: Extra Shot

If an athlete complains that their target has an unclaimed or extra shot, this is usually due to receiving a crossfire from another firing point. Take these steps to resolve the complaint:

1. Confirm the complaint; check with adjacent targets for missing shots (*possible crossfire*).
2. If an adjacent target has a missing shot, nullify the extra shot; make a manual entry in the main computer to record a crossfire zero (0) for the athlete who fired the crossfire.
3. If an extra shot cannot be identified before the end of the series, ask the TO to examine the shot times to determine if the crossfire shot can be identified. If yes, nullify that shot.
4. If the crossfire/extra shot(s) cannot be identified, nullify the lowest value shot(s).

FINALS – ADDING EXCITEMENT TO SHOOTING



The start of a World Championship Final in the 50m 3-Position Women event. All international, USA Shooting and NCAA finals are start-from-zero finals. The eight finalists shoot 15 shots kneeling, 15 shots prone and 15 shots standing, with eliminations starting after 10 shots in standing.



The start of a 3PAR Sporter Class Final. Most 3PAR Finals are Standard finals with scores being added to 3x10 or 3x20 qualification scores.

HOW TO CONDUCT FINALS

Finals, where the top eight athletes in the initial course of fire (*qualification*) complete the event in a final where scores determine the rankings of those top eight athletes, are now universally used in international competitions like the Olympics, World Championships and World Cups as well as in national competitions like USA Shooting and NCAA Championships. All National Council Championships and many other junior 3PAR competitions include finals in their events. It is possible but challenging to conduct finals with paper targets. The most spectacular and visually attractive finals are conducted on ranges with electronic targets.

TYPES OF FINALS

Complete, detailed RO Scripts for conducting finals are published in the ***NS3PAR Rules***. There are two types of 3PAR finals:

- **STANDARD FINAL.** All athletes shoot a 3x10 or 3x20 course of fire and the top eight shoot a 10-shot standing final with rankings of the top eight determined the total of their 3x10 or 3x20 scores plus their scores in the final.
- **START-FROM-ZERO FINAL.** All athletes shoot a 3x10 or 3x20 event and the top eight athletes advance to a 45-shot three position final. Finalists' qualification scores do not carry forward. Final rankings are decided by finals scores only.

PREPARING FOR FINALS

If finals are conducted correctly, they are great spectator events full of drama and excitement where rankings can change after each shot. Setting up the range correctly is important. Finals must offer fair competition for the athletes as well as provide a show that highlights the athletes' skills and the competition between them. This checklist describes how to prepare for a final.

- ☐ **8 Adjacent Firing Points.** Eight firing points are required to conduct a final. On a large range, choose eight points in the middle of the range. If possible, finals firing points should be relabeled with the letters A through H. AR10.2.2.
- ☐ **Spectator Seating.** If possible, provide spectator seating (or standing room) behind the finals firing points.

- ☐ **LCD Panel or Videoboard Display.** Electronic target manufacturers now provide display software that facilitates showing finalist scores on an LCD panel or with a projector and screen.
- ☐ **Finals Staff.** As few as two or as many as four or five Match Officials may be used to conduct a final. A CRO conducts the final using the correct final script. If possible, there should be a second RO, who observes the athletes on the firing line and handles any problems that arise there. A TO operates the main computer that controls the targets and the presentation of scores and rankings. A separate Match Official can serve as the Announcer or one person can serve as both the CRO and Announcer.
- ☐ **Schedule and Timing.** Be sure to include the Final Start Time (*when the first Record Fire shot for the final starts*) in the schedule and in the Match Program. This ensures that people who want to attend the final know when to be there. The schedule must allow enough time between the end of the last relay and the start of the final to finish scoring all targets, run a 30 min. score protest period (or 10-min. if EST are used) and allow the athletes in the final enough time to report to the finals reporting area 30 min. before the Final Start Time (*normally 75 to 90 min.*) AR8.2.
- ☐ **Qualifying for the Final.** All athletes in a competition event must have an opportunity to fire the 3x10 or 3x20 course of fire. The eight highest ranking athletes in this course of fire “qualify” for the final. AR10.2.3. If an athlete who qualifies for the final is unable to remain for the final, they are automatically given 8th place in the final rankings.
- ☐ **Final Start List.** A Finals Start List with the names of the finalists and their firing point assignments should be available (*announce finalists on the range*) at least 30 min. before the Start Time. If a Standard Final is conducted, the finalists must be squadded in order (*#1 on the left; #8 on the right*) according to their placing in the 3x10 or 3x20 course of fire. If a Start-From-Zero Final is conducted, firing points for the eight finalists must be assigned by a random draw.

- ☐ **Finals Reporting Area.** A separate room or area near the range should be set up as a reporting area for finalists. Finalists should report to this area 30 minutes before the Final Start Time.
- ☐ **Spectators.** Encourage spectators to attend finals. They can support finalists with applause and even cheering. Spectators typically include other athletes and coaches, parents and friends. If an electronic display of the finalists' targets is available, spectators should be encouraged to react when finalists make great shots.
- ☐ **PRE-FINAL ACTIONS.** Use the table (below) to time the run-up to the start time:

PRE-FINAL ACTIONS	
30 min. before	Finalists report to reporting area. Brief finalists on how the final is conducted. Complete equipment checks.
15 min. before	Arrange finalists in firing point order.
10 min. before	CRO: Call finalists to their firing points with ATHLETES TO THE LINE . Coaches may assist in bringing equipment to the firing points. Athletes must set their equipment down and turn to face the audience.
9 min. before	Announcer (or CRO) introduces finalists.
5 min., 30 sec. before	CRO commands TAKE YOUR POSITIONS and starts 5 min. Preparation & Sighting Time. Announcer may describe how final will be conducted.
30 sec. before	CRO calls STOP ; clear EST.
START TIME	CRO gives commands for first competition shot and START

HOW TO CONDUCT A FINAL

When conducting a final, strive for a smooth, dignified presentation that keeps the focus on the athletes and their marksmanship performances. Some aspects of the final pay attention to while doing this are:

- **Athlete Entrance and Introduction.** Ten minutes before the Start Time, the CRO announces **ATHLETES TO THE LINE**. Finalists should walk to their firing points in a single file, in firing point order. After arriving at their points, they must set their rifles and equipment down and turn to face the audience. The Announcer or CRO then introduces each finalist, starting with the athlete on firing point A (#1). Introductions should include each finalist's name and the school or club they represent (or hometown). After the introductions, the CRO commands **TAKE YOUR POSITIONS** and starts the Preparation and Sighting Time.
- **CRO Commands.** When conducting a final, it is important to use the script published in the **NS3PAR Rules**. When giving the commands to **LOAD**, **START** and **STOP**, be clear and consistent. Athletes time their shot preparations based on the CRO's command cadence so it must be the same for each shot.
- **STOP Command.** If all athletes in a final fire their shots before a time limit expires, the CRO should command **STOP**. To avoid making a mistake and commanding **STOP** when all athletes have not fired, a second RO should confirm that all finalists have fired.
- **Announcer Commentary.** After each **STOP** command for a shot or series, Announcer commentary should follow. It is not necessary to call out the shot values if a videoboard or LCD display panel is used where everyone can see the scores. Commentary should identify who is leading, who had great shots or series scores and who is gaining or falling back in the rankings. In finals with eliminations, identifying the athletes who are most in danger of elimination is interesting, and each athlete who is eliminated should be congratulated for a fine performance. AR10.3.6 d).
- **Tie-Breaking.** If there are ties for the first three places in a Standard Final or for any place in a Start-From-Zero Final,

those ties must be broken with shoot-offs. Conduct the shoot-off by commanding **THESE COMMANDS ARE FOR THE ATHLETES ON FIRING POINTS** (*firing point numbers for the tied athletes*) **ONLY...FOR YOUR TIE-BREAKING SHOT...LOAD...(5-second pause)...START**. The tied athletes have 50 seconds to fire their shots. If one shot does not break the tie, tie-breaking shots continue until the tie is broken. When conducting a tie-breaking shoot-off, be alert for any other athlete who attempts to load and shoot. Stop them, or if an athlete who was not one of the tied athletes actually fires a shot, simply nullify that shot.

- **Ending the Final.** After the last shot in the final is fired and ties, if any, are broken, end the final by announcing **RESULTS ARE FINAL** and immediately recognize the top three athletes (*The script for doing this is in the CRO finals script.*).

ISSUES AND PROBLEMS IN FINALS

ROs who conduct finals must be prepared to deal with a few issues or problems that may occur during finals. AR10.2.9.

- **Athlete Loads before LOAD Command.** It is not permitted to insert a pellet in the breech end of the barrel or even to place a pellet on a loading port until the command **LOAD** is given. Give a warning for a first violation. If it happens a second time, assign a 2-point deduction to the score of the next shot.
- **Aiming Exercises.** Many athletes want to shoulder their rifles and aim at their targets between shots. This is permitted as long as rifle actions remain open, and dry firing is not attempted.
- **Early STOP.** If the CRO makes a mistake and commands **STOP** before all finalists have fired a single shot or completed a series, any athlete who has an unfired shot(s) must be given a full firing time to fire that shot/series while the other finalists stand by.
- **Shots Fired Before START or After STOP.** Either violation must be scored as a miss for that shot.
- **Malfunction.** If a finalist has an allowable malfunction, they must be given a maximum of one (1) minute to repair the malfunction or replace a malfunctioning rifle. The athlete must then be given a new, full firing time to fire/complete that shot/series.

SCORING & RESULTS OPERATIONS

This section is designed to guide Statistical Officers (SO) in their work to manage competitors and to score and rank the shots they fire. Scoring and Results Operations include:

- **Match Management System.** Today, most MMS are computer software systems. The MMS records data about participants and their scores and is programmed to produce Start Lists and Results Lists necessary for the conduct of competitions.
- **Pre-Match Administration.** Pre-match tasks include promoting participation, sending Match Programs and entry forms, accepting entries, confirming entries when athletes arrive and generating Start Lists.
- **Scoring Process.** During the competition, targets must be scored, and those scores must be recorded in the MMS where they are processed by breaking ties and ranking the athletes.
- **Results List Production.** Competitions should produce three different Results Lists: 1) Intermediate Results (*during Record Fire, optional*), 2) Preliminary Results (*to facilitate Challenge Periods, required*) and 3) Final Results (*electronic or paper copies should go to all participants, required*).

The diagram on the next page is a graphic, conceptual portrayal of 3PAR Scoring and Results Operations.

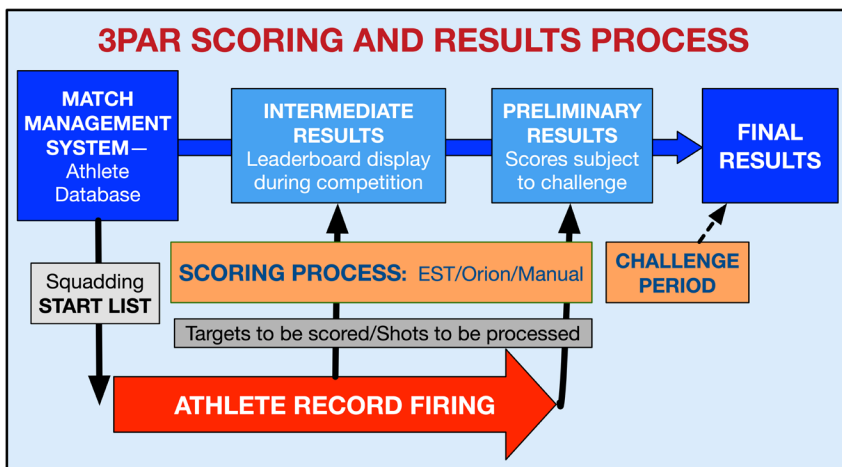
THE MATCH MANAGEMENT SYSTEM (MMS)

Match sponsors must have a system for managing data about participating athletes and a scoring system that determines scores, records data and produces outputs essential to the conduct of the competition. The MMS should record and manage these data elements:

- **Entry Data.** Participant names, contact information, and CMP competitor numbers.
- **Ranking Data.** For each participant, the system must record event entries and data used to establish categories or competitor groups (sporter or precision categories; ages, etc.).

- **Start List.** Generate relay and firing point assignments (squadding) and produce start lists.
- **Scores.** Record all scores fired by participating athletes by event, with stage and series scores, as produced by the Scoring Process.
- **Results Lists.** Display ranked Intermediate, Preliminary and Final Results, with ties broken and athletes listed in correct categories.

MMS Alternatives. The **Orion Results System** is integral to the Orion Scoring System and fulfills all of these functions. The Orion system can also manage participant data and scores from Athena, Megalink or Sius electronic targets. **Megalink, Sius and KTS EST installations** may include MMS that are available for those targets. Many match sponsors still use **spreadsheet software (Excel or Numbers)** where data entry for competitors and their scores must be done by hand. Another alternative is to use some type of manual system.



PRE-MATCH ADMINISTRATION

Conducting a successful competition requires working in advance to prepare the MMS so it can function effectively during the competition. Here are some tasks the SO must complete before the competition:

- ☐ **Learn How to Operate the MMS.** If the Orion Scoring System is used or if the MMS that comes with other electronic targets is used, the SO or TO who operates the MMS must have experience with the system prior to the competition. With any of these systems, try to run practice matches during team or club training to be sure the TO or SO knows how to operate the system. Whether the MMS is a commercial MMS or an Excel or Numbers spreadsheet, it is essential to have the match file set up in advance.
- ☐ Orion users who are not already familiar with the **Orion Scoring Support System** should take full advantage of the detailed instructions regarding all aspects of the Orion system that are available. Orion offers a comprehensive menu of topics related to “*Competitor and Team Management*” at <https://support.orionscoringsystem.com/index.html?competitor-and-team-management.html>.
- ☐ **Record Athlete and Team Entries.** Every competition should encourage participating teams and individuals to submit entries in advance. When entries arrive, any new information regarding participating athletes and teams must be recorded in the system.
- ☐ **Entry Confirmation at the Match.** The entry confirmation process starts when participating athletes and teams arrive at the match site (range) and check in at the statistical office. One person, usually an adult leader or team coach, should confirm entries for all of their team members. Entry confirmation includes verifying that athletes who were entered in advance are actually present and that their entry data in the MMS is correct. Check-in usually includes the payment of entry fees and issuing squadding assignments.
- ☐ **Generate Start Lists.** Start or squadding lists provide the names of athletes and their relay and firing point assignments. In 3PAR events, teams are usually squadded together on adjacent firing points so team coaches can maintain contact

with the entire team. If advance entries are not required, it may not be possible to generate a start list until athletes arrive and check in. Start Lists should be posted on the main bulletin board. AR7.2.

- ☐ **Equipment Control.** Conducting equipment control checks before competitions is optional, but this is the best way to ensure that all participating athletes are using equipment that is legal according to **NS3PAR Rules**. Many major 3PAR competitions do require equipment checks before athletes begin firing. Instructions and checklists for conducting 3PAR equipment control checks are found on pages 74-79. AR7.3

THE SCORING PROCESS

The scoring process used in 3PAR competitions must score all Record Fire shots, record those scores, break ties, rank the athletes according to the scores, and produce the results lists required by the rules. Scoring must be accurate, consistent, fast and transparent to athletes, coaches and spectators.

Scoring Methods

3PAR competitions use one of three different scoring methods that are authorized by the rules: 1) electronic targets, 2) paper targets scored by Orion VIS scoring or 3) paper targets scored manually.

- **Electronic Targets (EST).** Detailed information regarding the use of electronic targets and the resolution of EST scoring issues are provided on pages 30-38.
- **Paper Targets Scored by Orion or Manual Scoring.** When paper targets are used, fired targets may be scored with the Orion VIS system or they may be scored by manual scoring. Where possible, all shots fired in a competition should be scored with the same method of scoring, but virtual matches and even some ranges will have both Orion scoring and electronic targets so using only one scoring method is not always possible. In any case, one scoring method cannot be used to check targets scored by another method. AR8.1.2.

Score Recording

Most **electronic targets** have their own or are linked to an electronic MMS. If the range uses the **Orion Scoring System**, scores determined by Orion are automatically uploaded into the Orion MMS. If the range uses **manual scoring** or **electronic**

targets that are not linked to the MMS, all scores must be manually entered in the MMS.

Target Handling

Competitions that use paper targets must have procedures to control **target labeling, the distribution of unfired targets, routing fired targets** to where they are scored **and the display of targets** for score protest periods after they are scored.

- **Target Labeling.** Athletes' targets must be labeled so the athlete, firing position and the series or stage of fire can be identified. Most targets have spaces for this information on the upper right corner of the target. This information can be written by hand or Statistical offices can generate their own competitor labels. Orion users can generate bar code labels that the Orion Scoring System uses to identify athletes and their scores. Orion Scoring System Support provides full instructions for generating and using barcodes at <https://support.orionscoringsystem.com/index.html?barcode-labels.html>.
- **Target Distribution and Collection.** The target flow plan must provide for target security. Only authorized persons should have access to fired targets. The target handling procedure must answer these questions:
 - 1) who will hang and change targets--coaches, athletes or Match Officials?
 - 2) how will targets be distributed?
 - 3) how will fired targets be picked up and taken to where they are scored? and
 - 4) how will targets be displayed for inspection after they are scored?

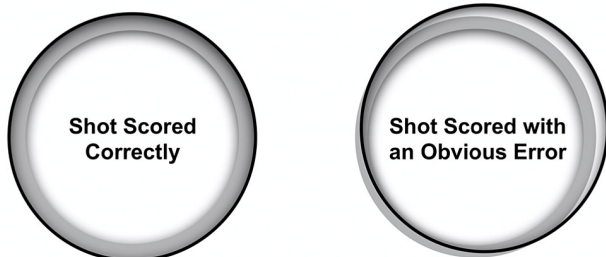
***Target Handling Integrity:
If Athletes and coaches
are allowed to handle fired
targets, they should be
instructed to handle fired
targets only by their edges
and to not place hands or
fingers on the face or back
of fired targets.***

ORION VIS SCORING

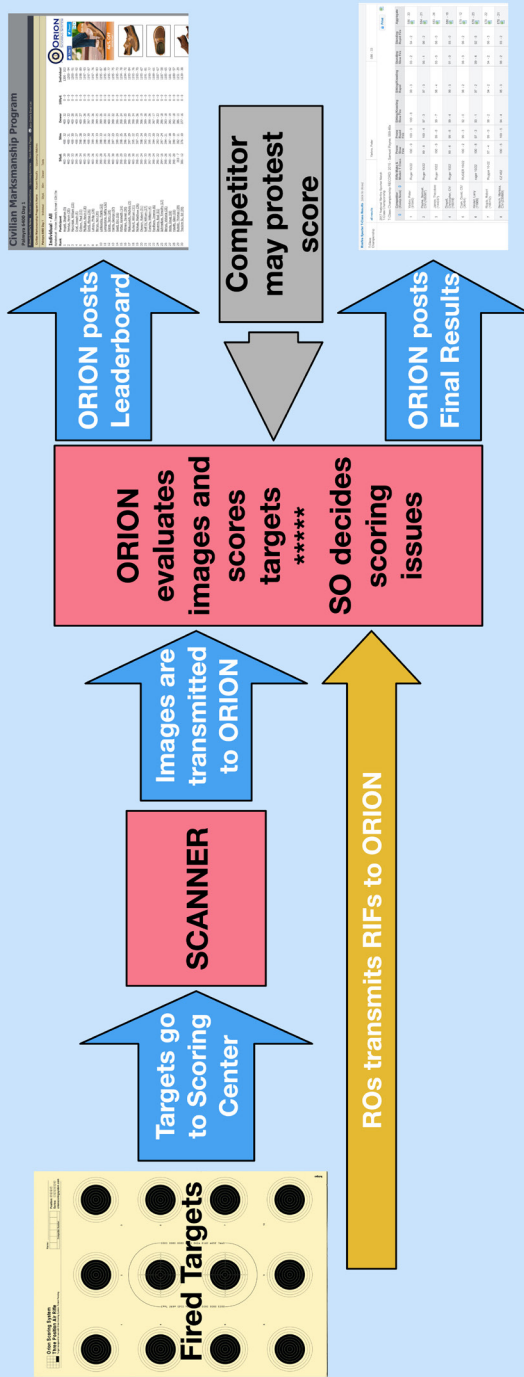
Orion VIS software scores shots by using computer vision technology to measure the distance (radius) between the visual center of the target and the center of a shot hole. Orion software determines x and y coordinates for each shot to describe the shot's location and score the shot. The Orion Scoring System also preserves images of scored targets that can be used to resolve scoring issues and to display scores and shot locations in internet website displays. The diagram on the next page illustrates the VIS scoring process.

- **Scoring Procedures.** Organize the flow and orientation of targets so that when they reach the scanner the top of the targets enters the scanner first. There will be infrequent scoring issues that a trained TO or SO needs to resolve. These include occasional shots where the way a shot hole is torn is not recognized by Orion's scoring algorithm. A TO at the main computer must resolve scoring issues that are identified by the Orion software.
- **Penalties, Deductions, Irregular Shot Reports.** The CRO or RO should report any penalties, deductions or irregular shots to the SO (*using RIFs to do this is recommended*) so that these issues can be taken into account during scoring. The TO should maintain a log of score adjustments that are made to Orion-scored shots.
- **Requests for Re-Evaluation of VIS Scores.** An athlete who feels that a shot was scored incorrectly may ask the TO or SO to re-evaluate that particular shot (*a charge of not more than \$3.00 may be collected for each request; returnable if the SO decides there was an "obvious error"*). An obvious error is one where there is a scoring ring misalignment of two scoring ring widths or more. AR8.5.5

Shot Score Verification — VIS Scoring System



ORION VIS 3PAR SCORING PROCEDURES



MANUAL SCORING

In manual scoring, human scorers decide scores according to whether the outside edge of a shot hole touches or breaks the outside edge of a scoring ring printed on the target. Scoring aids (scoring gauges and templates) are used to assist scorers in making more precise scoring decisions. AR8.3. If manual scoring is still used at your competitions, there are several requirements the SO must address to ensure that the scoring process is as accurate as possible.

- **Scoring Standard.** Every shot must be given the score of the highest value scoring ring that its shot hole hits or touches. AR8.1.3.
- **Scoring Staff.** There should be sufficient Scorers so that teams of two scorers are available for every 10 firing points on the range. Two-person scoring teams should work together so that whenever there is a doubtful shot, both Scorers must concur in the plus/minus decision. If two Scorers do not agree, the SO or a Scoring Supervisor must be available to break the tie.
- **Scoring Aids.** To decide doubtful shots, Scorers must use an outward scoring gauge with a flange diameter of 5.45-5.50 mm to score shots in the 3 to 10 rings. Scorers must use an inward scoring gauge with a with a flange diameter of 4.50-4.55 mm (0.178-0.182 in.) to score shots in the 1 and 2 rings. In order to score accurately, Scorers should be provided with 1) a scoring box to hold targets in a horizontal position while they are scored (see illustration on page 53), 2) excellent lighting on the targets being scored and 3) a magnifying glass to use in examining close shots. When Scorers examine scoring gauges inserted in close shots, they should be trained to look at the edge of the gauge (*flange*) from an angle (*to avoid being misled by a shadow created by the gauge's flange*).

Scoring Process, Manual Scoring. AR8.3.

Scorers who score paper target should be trained to follow this procedure:

1. Place the target to be scored on a flat surface between the two Scorers. A target holder (see illustration on next page) should be used to hold the target being scored.

2. Score the bulls in order; one Scorer calls out scores and writes those scores on the side of each bull.
3. If the score of a shot is doubtful, the second Scorer must insert a scoring gauge. Both Scorers must look at the gauged shot and call the shot "in" (thumbs up) or "out" (thumbs down). Scorers should make their calls at the same time so one Scorer does not influence the other. When a doubtful shot is gauged and decided, Scorer #1 must note by the score for that bull that the shot was gauged. This is important because any shot that has been gauged to make a scoring decision may not subsequently be protested and gauged again (AR8.3.5, *repeatedly inserting scoring gauges can alter the shot hole*).
4. If the two scorers disagree, the SO or a Scoring Supervisor must be available to make the final decision.

MANUAL SCORING OF AIR RIFLE TARGETS

SCORING AIDS

Scoring Gauges:

inward (l.) & outward (r)

Magnifying Template:

To score torn shot holes



TARGET HOLDER

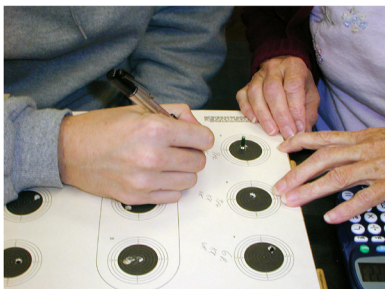
Place target on flat, horizontal surface; targets must have good, even lighting



SCORERS WORK IN PAIRS

One Scorer writes scores on target; if score is doubtful, 2nd Scorer inserts scoring gauge; both Scorers call "IN" or "OUT"

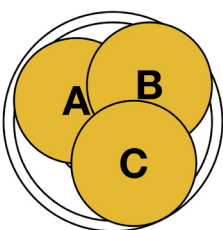
If they disagree, CSO decides; mark all gauged scores



Scoring Decisions, Manual Scoring. The diagrams on this page and the next illustrate how to decide doubtful shots score with either outward or inward gauges. AR8.3.3; AR8.3.2

Outward Gauge Scoring. If a doubtful shot is gauged with an outward scoring gauge (5.45-5.50mm flange diameter) the diagram (below) shows how to read the gauge and decide whether the shot is “in” or “out.” AR8.3.2

OUTWARD GAUGE SCORING



A-Outside edge of gauge is inside of outside edge of next scoring ring.

Shot scores higher value.

B-Outside edge of gauge protrudes past outside edge of next scoring ring.

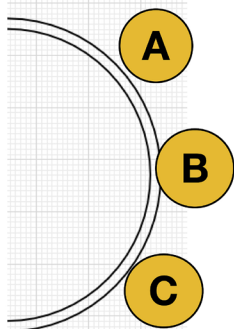
Shot scores lower value.

C-Outside edge of gauge is tangent to outside edge of next scoring ring.

Shot scores higher value

Inward Gauge Scoring. Look at the inside edge of the scoring gauge flange and its relationship to the scoring ring in question. The diagram (below) shows how to use an inward scoring gauge. AR8.3.3.

INWARD GAUGE SCORING



A-Outside edge of gauge is outside of outside edge of next scoring ring.

Shot scores lower value.

B-Outside edge of gauge protrudes past outside edge of next scoring ring.

Shot scores higher value.

C-Outside edge of gauge is tangent to outside edge of next scoring ring.

Shot scores higher value

Scoring Protests. After paper targets are scored, they must be available for inspection by athletes and coaches who may, during a defined “Challenge Period” of not more than 30 minutes, inspect their targets and submit a “scoring protest” if they believe any of their shots were scored incorrectly or if total scores were added incorrectly. Match sponsors may charge a maximum scoring protest fee of \$3.00, which must be returned if a protest is upheld. The SO, or another qualified Match Official who did not make the original scoring decision, is responsible for deciding protested shots. Their decisions are final and may not be appealed. AR8.2.

A Comment on Scoring Protests. *The purpose of scoring protests is to give athletes whose targets may have been scored incorrectly an opportunity to ask for a review of those scoring decisions. The rules establish strict controls for making scoring protests. Shots that have been scored correctly may not be rescored. Athletes, and not coaches, should make scoring protests. Protesting the scores or targets of other athletes or teams is not permitted unless there is an obvious error. Scoring challenges or protests must be about correcting errors, not about ‘buying points. AR8.2*

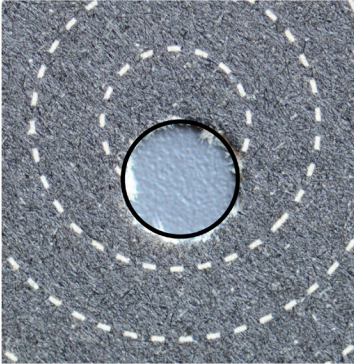
SCORING ISSUES

When scoring paper targets, whether with Orion or manually, there are several different scoring issues that may arise. This chart lists most of those issues and the actions SOs should take to resolve them.

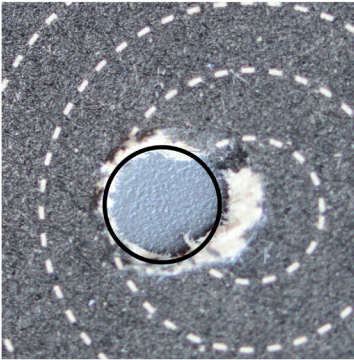
SCORING ISSUE RESOLUTION	
ISSUE	ACTIONS TO TAKE:
Torn Shot Hole	Torn shot holes must be scored according to where the pellet actually hit the target. <u>Do not use a scoring gauge to score torn shot holes.</u> Score torn shot holes with a template (Eagle Eye). AR8.3.4.
Two shots on one bull	If there are <u>two shots on one bull and another bull is left open</u> with no shot, there is no penalty for the first two occurrences of this in a 3-position event. Assign the lowest score to an open bull. AR7.15.7.
Two shots on one bull Double load	If an athlete fired <u>two pellets at the same time</u> , this should be confirmed by the RO. Nullify the lowest value shot and score the highest value shot.
Unclaimed Shot	The claim that a shot hole was not fired by the athlete must be confirmed by the RO. If an athlete receives a shot that was not fired by them, they must inform the RO immediately and not wait until the end of the stage. If confirmed as a crossfire from another target, the unclaimed shot may be nullified. If not, it must be scored as a Record Fire shot. AR7.15.9; AR7.15.11.
Too many shots	If an athlete fires more than the authorized number of shots in one position, nullify the last shot(s) fired. Apply a 2-point penalty to the last valid shot for each extra shot. AR7.15.8.
Altering Targets	Altering or tampering with a fired target in an attempt to obtain a higher score is “Unsportsmanlike Conduct” and can result in severe penalties. The graphic on the next page illustrates examples of illegal target tampering. AR7.20.5.

TARGET TAMPERING

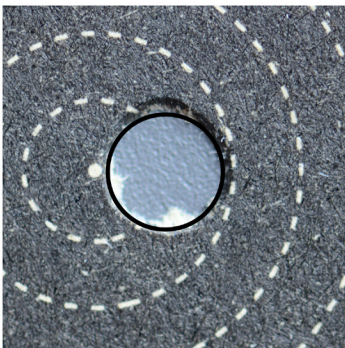
Target tampering is uncommon but Scoring Officers must be alert for it. This diagram show a normal shot hole (top) and two examples of illegal altered shot holes.



Normal Shot Hole - No Alteration.
The ring fits the shot hole.



Altered Shot Hole - the right edge of the shot hole has been torn with a sharp object.
The ring shows the actual shot location.



Altered Shot Hole - the shot hole has been enlarged with a round object.
The hole is slightly larger than the ring.

RESULTS LIST PRODUCTION

As soon as Record Fire shots are scored, those scores must be used to produce three different types of results lists (AR8.7):

- **Intermediate Results.** Intermediate results are ranked incomplete results produced during a competition to show coaches and spectators how competitors and teams rank. The Orion Scoring System, Orion Athena, Megalink and other electronic targets have intermediate results displays that can be projected on an LCD panel or videoboard in the range or assembly area. The Orion leaderboard display uses score averaging software to rank competitors. The display of intermediate results in a leaderboard format is optional but doing this can play an important role in adding interest to a competition.
- **Preliminary Results.** A Preliminary Results List must be posted in the range as soon as all competitors' shots are scored. Athletes and coaches then have a maximum of 10 minutes to protest scores produced by electronic targets or 30 minutes to inspect fired paper targets and make scoring protests. AR8.2.
- **Final Results.** After any score protests are decided, a final results list with official final results must be produced to conclude the competition. Final results lists are used to recognize award winners and inform interested persons about the competition.
- **Results Display.** Preliminary and Final Results Lists must be displayed on an Official Bulletin Board at the range AR5.5.8. When 3PAR match results are submitted to the CMP, they are posted as an electronic results list on the CMP Competition Tracker website (https://ct.thecmp.org/app/v1/index.php?do=reportResultsListing&filter=event_type&filter_value=AIRRIFLE) . The Orion Results System offers users websites where Intermediate, Preliminary and Final Results may be posted for internet viewing during and after competitions. AR8.7.
- **Orion Mobile App.** All results scored by Orion or Athena targets are instantly available to individual athletes, coaches and Match Officials via the Orion Mobile App. Live results ranked according to average shot scores and final results can

be viewed. Athletes, coaches and interested persons can use it to view scores and shot groups during or after a Match. Match Officials can use it to view registration information and squadding lists. Range Officers can use the App to prepare and submit Incident Reports (RIF). The app is free and available for both IOS and Android.

- **On Range Results Displays.** Many EST systems now support on-range graphic presentations of results on LCD panels or with a projector and screen. These displays of Intermediate Results let coaches and spectators know how the athletes are performing during the competition. These displays are controlled by the TO with the main computer.



The Orion Mobile App



The Orion on-range display ranks athletes in the competition based on their average score. This type of leaderboard display allows coaches and spectators to follow the progress of a competition until the last shots are fired.

- **Displaying Results on the Internet.** EST and the Orion Results System also support the display of scores and graphical images on the internet. Encouraging team supporters, friends and family member to watch match results on the club or team website can be an important means of keeping them informed. Match sponsors should definitely take advantage of this capability when their targets or MMS offer this functionality.

RULE VIOLATIONS AND PROTESTS

Under **NS3PAR Rules**, rule enforcement focuses on ensuring rules compliance and fair competition for all athletes, based first on education and only as a last resort on applying penalties or disqualification. In order to ensure that the rights of athletes to fair treatment in accordance with the rules are protected, the rules also provide for complaint and protest procedures.

HOW TO HANDLE POSSIBLE RULE VIOLATIONS

If you see an athlete who is doing something that you believe violates a competition rule, take the following steps:

1. **Be Sure of Your Conclusion.** Recheck your rulebook to be sure it says what you think it says. If you are not sure, consult another Match Official.
2. **Possible Penalty or Disqualification:** If there is an indication that an athlete may be doing something that gives them an unfair advantage, and that this could lead to a penalty or disqualification, get a second Match Official involved as soon as possible; this should normally be the CRO, CSO or MD. Two Match Officials must concur in disqualifying a competitor. Only Match Officials with “Match Officer” status (MD, RO, TO, SO) have the authority to disqualify competitors. AR7.20.
3. **Give a Warning and Instructions to Correct.** This is the education part of rule enforcement. Unless the violation involves an apparent, deliberate attempt to gain an unfair advantage, give a warning to the athlete that explains the rule being violated and gives instructions to correct the fault. In most cases, rule violations are due to athletes not being aware of a rule or of how they are violating a rule. Courteous warnings and clear instructions on how to comply with the rule will correct most violations. Document any warning given with a RIF.
4. **If the Warning Does Not Correct the Fault.** If an athlete does not correct the fault, it could be because they did not understand the warning or instructions. A repeat of the warning and instructions may be necessary. If an athlete refuses to correct the fault, notify the CRO, CTO or MD.

5. **Decide if the Violation is Open or Concealed.** If a rules violation is confirmed, Match Officials must decide if the violation was “open” (*there is no evidence that the athlete gained or sought to gain an unfair advantage*) or “concealed” (*the athlete gained or sought to gain an unfair advantage*). Warnings or explanations are usually appropriate for open violations. Disqualifications may be necessary in case of concealed violations. AR7.20.1 & AR7.20.2.
6. **Follow-Up to Ensure Rule Understanding.** In most cases a warning and instructions to correct a fault will resolve the rule violation. It is, nevertheless, a good practice to follow-up with the athlete and their coach after they finish firing to discuss the violation, warning and instructions, to be sure they understand the rule that was involved and how to follow it.

POSSIBLE RULE VIOLATIONS

Match Officials have the authority and responsibility to enforce competition rules. Most violations that do occur are due to a lack of knowledge of the rules rather than to deliberate attempts to cheat. The lists that follow identify the most common rules violations that occur during 3PAR competitions, together with actions to take regarding those violations.

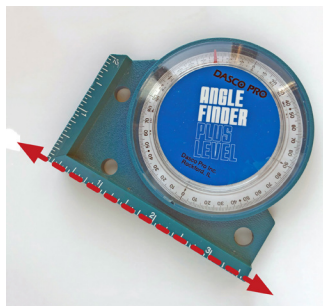
Firing Position Violations:

- **Firing Position Inspections.** Try to check firing positions for possible violations during the Preparation and Sighting Times so if it is necessary to instruct an athlete to change their position, this can be done before Record Fire begins. ROs should study the firing position rules (5.1.1, 5.1.2, 5.1.3) in advance to be aware of the technical details in those rules and how violations could occur.
- **Firing Line Violation.** Ranges are required to mark the firing line with a red or yellow strip that is 50-60 mm wide. No part of an athlete's firing position may contact the floor ahead of the back (rear) edge of that stripe. If an athlete's elbow (prone) or foot (kneeling or standing) is on or ahead of any part of the firing line stripe, instruct them to move back. AR5.1.
- **Prone Position is Too Low.** The athlete's left (sling arm) forearm must form an angle of at least 30 degrees to the floor. To check a prone position, use a carpenter's angle finder or triangle with a 30-degree angle side and visually align it

with the axis of the forearm. If the forearm angle is too low, instruct the athlete to raise their position until the forearm angle is at least 30 degrees. AR5.1.1 h).

- **Standing Position Illegal Support.**

Athletes will sometimes unknowingly, and sometimes deliberately, allow their body or clothing to rest against a bench or table on the firing line. If any part of an athlete's body or clothing is in visible contact with a possible support, instruct the athlete to move their position so that there is no contact. AR5.1.2 a).



A carpenter's angle finder can be used to check prone forearm angles.

- **Kneeling Position Left Elbow Location.** In kneeling, the point of the elbow may be placed no more than 100 mm (4 in.) back from the middle of the knee-cap or no more than 150 mm (6 in.) forward (over) the middle of the knee-cap. This can be measured but be sure there is a clear violation before instructing an athlete to adjust their position. AR5.1.3 d).
- **Kneeling Position Kneeling Roll.** An athlete does not have to use a kneeling roll, but if a roll is used the foot must be vertical or turned no more than 45 degrees from vertical. An athlete cannot sit on the side of their foot if it is placed on a kneeling roll.
- **Illegal but Difficult to Enforce.** If an athlete wears a cap or visor, it may not rest on or touch the rear sight AR4.7.7. In standing or kneeling, the right hand on the pistol grip may not also grasp the shooting jacket or outer clothing layer. The lower part of the butt-stock cannot rest on the chest. These acts are all illegal, but they are difficult to see and checking often cannot be done without disturbing the athlete.

Equipment Violations:

- **Sporter Class, Trigger Weight Violation.** If an athlete's trigger fails to lift 1.5 lbs. in a post-competition trigger check, scores fired by that athlete with that rifle must be disqualified. AR4.2.3.

- **Belt Violations in Standing.** Special belt configurations are sometimes used to gain an unfair advantage. For example, using an extra-long belt with the long end folded two or three times and placed under the left elbow is illegal. Turning the belt so that the buckle is under the left elbow is also illegal.
- **Illegal Blinders.** Rear sight blinders may be a maximum of 100 mm long and 30 mm deep. Head blinders may be a maximum of 30 mm wide. Blinders that exceed these dimensions must be trimmed or removed. AR4.7.8; 4.7.9.

Other Rule Violations:

- **Coaching Violations.** If an athlete is receiving illegal coaching, both the athlete and coach must be given warnings. If the illegal coaching continues, deduct two points from the score of the last shot fired by the athlete and instruct the coach to leave the area behind the athlete's position. AR7.20.4.
- **Illegal Team Member.** If there is a protest regarding whether a team member is eligible according to Rule 3.2, a Jury at the competition can make a preliminary eligibility determination, but this question must be forwarded to the National Jury of Appeal for a final ruling. AR3.2.5.
- **Unsportsmanlike Conduct.** A number of serious violations are classified by the rules as "**unsportsmanlike conduct.**" They include cheating, disobeying the instructions of a Match Official, falsifying scores, purposely damaging range equipment, disorderly conduct, dishonesty, inappropriate behavior or language, etc., Match Officials must decide how serious the violation is. In some cases, a warning is sufficient to resolve the issue. In cases of serious violations such as cheating, falsifying scores, altering targets, attacks against persons or property, etc., disqualification is clearly appropriate. Such matters may also be referred to the National Council (at CMP) for further disciplinary action. AR7.20.5.

COMPLAINT AND PROTEST PROCEDURES

Complaint and protest procedures give athletes or coaches who disagree with a competition condition or a Match Official's decision **the right to be heard and receive fair and equitable treatment according to the rules**. **NS3PAR Rules** emphasize handling complaints and disputes informally when possible and only when that does not resolve an issue, proceeding with written protests and possible Jury decisions. AR9.0. Steps to follow in resolving complaints and disputes are:

COMPLAINT. An athlete or coach should first state their COMPLAINT orally to a Match Official who may answer the COMPLAINT or refer it to another Match Official who can. AR9.1.

VERBAL PROTEST. An athlete or coach who is not satisfied with how their COMPLAINT was handled or who disagrees with a competition condition or Match Official's decision may make a VERBAL PROTEST to a Match Official. A VERBAL PROTEST must be made within 30 minutes after the incident in dispute. There is no fee for a VERBAL PROTEST. Two Match Officials must hear the PROTEST, may ask questions to be sure they understand the PROTEST, and make a decision. AR9.1.

WRITTEN PROTEST. If the competitor is not satisfied with the Match Officials' decision regarding their VERBAL PROTEST, they may submit a WRITTEN PROTEST. WRITTEN PROTESTS must be submitted within 30 minutes after a VERBAL PROTEST is decided or after the incident in dispute and be accompanied by a \$10.00 fee. If a WRITTEN PROTEST is submitted, the MD must appoint a 3-person Jury to hear the PROTEST and make a decision. AR6.2; AR9.1.2.

Note: A protest form is printed on page 64 of the NS3PAR Rules that match sponsors may copy and make available to athletes or coaches who wish to submit written protests.

APPEAL TO National Jury of Appeal. If either the competitor or Match Officials wish, an APPEAL against a Jury decision regarding a WRITTEN PROTEST may be submitted to the CMP within 72 hours after the Jury decision is given. The APPEAL must be submitted in writing to the CMP Competitions Department and will be decided by the National Jury of Appeal. Their decision is final. AR9.2.

AWARDS AND AWARD CEREMONIES

For an athlete, as well as for the athlete's teammates, coach and parents, receiving a competition award in front of other competitors and spectators, at a properly-staged award ceremony, can be an especially memorable experience. One of the best ways to add meaning and appeal to 3PAR competitions is to conclude them with award ceremonies. Here are some planning guidelines for staging award ceremonies.

Award Ceremonies Scheduling. Deciding whether to schedule an award ceremony depends largely upon whether most of the competitors and participating teams will be present at the end of the competition. If finals conclude the competition, an awards presentation can be scheduled immediately after the finals. If there are no finals and paper targets are used, a ceremony cannot take place until targets from the last relay are scored and the challenge period is concluded. Award ceremony times and locations must be listed in the Competition Schedule and Match Program.

Awards. Medals with neck ribbons are probably the most common individual awards chosen for 3PAR matches. Team awards include trophies and medals for team members. In addition to giving special recognition to the 1st, 2nd and 3rd place winners special consideration should be given to creating an awards schedule where a larger number of individual and team awards are given. All awards must be ordered well in advance to be sure they are available for the ceremony. Before the ceremony, lay out the awards in the order they will be presented.



This was the awards stage for the 2018 World Junior Championship. The podium and backdrop can be a model for 3PAR award ceremonies.

Award Ceremony Area. An awards presentation area with space for the podium and seating for spectators needs to be set up. The three-tiered awards podium has become standard for 3PAR award ceremonies. Award platforms must be large enough for four- or five-person teams. The backdrop for the awards podium is critical because the awards area is usually the most-photographed location in a competition. The backdrop should identify where the competition took place, the name of the match or the match sponsor.

Ceremony Personnel. A minimum of three persons are needed to conduct an awards ceremony, 1) an Announcer, 2) Awards Presenter and 3) Awards Coordinator. The Presenter is the person who actually presents the awards to their winners. This is typically an honorific position. Match sponsors often try to invite an important person in their organization or community or an adult shooting champion to make the presentations. The Awards Coordinator is a key to smooth ceremonies because they make sure the correct awards are handed to the Presenter as an award winner is announced.

Presentation Procedure. Presentation procedures vary, but a recommended procedure should follow these guidelines (Presenters may need to be briefed on the procedures to follow):

1. The Announcer announces the event, award winner and the winning score. If the three-tiered podium is used, the order of presentation should be 3rd, 2nd, 1st.
2. The Awards Coordinator should place the award in the Presenter's hands. The Presenter should stand to the side of the podium until the award winner takes their position on the stand.
3. The Presenter should go to the award winner to present the award. Place the medal on the winner or present the award, offer a congratulatory handshake to the winner and step back to the side of the podium.
4. When the award winner(s) have received their awards, the Announcer should invite anyone who wants photos of the winners to take their photos.

PLANNING AND ORGANIZING 3PAR COMPETITIONS

COMPETITION PLANNING

When planning a 3PAR competition for junior athletes, here is a checklist of things to consider in organizing the competition:

- ☐ **Match Sponsor.** The match sponsor is normally an organization, shooting club or junior shooting club, school rifle team, JROTC Unit or perhaps a community organization. The match sponsor is responsible for making arrangements to provide a range and administrative space and for appointing the MD.
- ☐ **The Competition Director or Match Director (MD).** The next step in organizing a competition is to identify the person who will be in charge of the competition. The MD is responsible for leading the planning group, preparing the program and usually for appointing staff (ROs, SOs, etc.). AR6.1.
- ☐ **Match Schedule.** Once a decision has been made to organize a competition, one of the first things to do is to prepare a schedule. The schedule identifies dates, specific events to be offered and a timetable for conducting those events.
- ☐ **Scheduling Guidelines.** Match schedules must have precise time schedules that list the start times when each relay will be called to the firing line as well as the times when other important activities will take place. After a time schedule is published, it must be followed. Never start a relay before its published start time. If it becomes necessary to change the schedule, be sure the new schedule is communicated to all registered participants. Here is a list of planning times for different 3PAR events (*precise times may vary depending upon the target system being used and the times needed to change or service targets*):
 - o **3x20 relay:** **2 hours, 15 minutes**, from call to line to clearing the line.
 - o **3x10 relay:** **1 hour, 45 minutes**, from call to line to clearing the line.

- o **Final Reporting Time: 30 min. before Final Start Time.**
Pre-Final Actions (see page 45) including the entry of finalists, finalist introductions and preparation and sighting time must be completed before the Final Start Time (*when the first competition shot' starts*).
- o **10-shot traditional final:** 15-20 min. from Start Time to medalist recognition.
- o **24-shot one position final:** 30 min. from Start Time to medalist recognition.
- o **45-shot three-position final:** 50 min. from Start Time to medalist recognition.

☐ **Match Program.** After a schedule is established, the MD or Match Sponsor must prepare a detailed Match Program that provides essential information about the competition. AR5.6. Match Programs should include:

- o *Name of Match and Match Sponsor.*
- o *Date(s) of the competition.*
- o *Location, with detailed directions to the range.*
- o *Contact information for entries and information.*
- o *List of events, with detailed time schedule.*
- o *Sanctioning information and confirmation that the competition will be governed by the **NS3PAR Rules**.*
- o *Entry fees.*
- o *Award schedule.*
- o *If competitors or teams are expected to travel from a distance that requires overnight stays, the program should provide information about local restaurant and housing possibilities.*
- o *If any of the following exceptions apply, that must be stated in the match program: If competitors are required to wear eye protection, AR2.13.1; If the "best four count team" score rules will be used, AR3.2.2 c); If shooting mats are not provided at the range, AR4.7.5; If both electronic and paper target scoring will be used, AR8.1.2.*
- o *Any special details about the competition that are not covered by the rules.*

- ☐ **Match Sanctioning.** Sanctioning means the competition is officially recognized by the Council. Sanctioning information and application forms are available on the CMP website at <https://thecmp.org/youth/air/sanctioned-three-position-air-rifle-matches/>.
- ☐ **Promotion.** As soon as a competition is planned, and a match program is prepared, an essential step is promoting participation in the match. Informing other organizations with potential participants is a key to building larger participation. Match sponsors that conduct regular competitions maintain email lists of previous participants to use in promoting upcoming competitions.
- ☐ **Junior Distinguished EIC Matches.** To award EIC points that count towards earning the prestigious **Junior Distinguished Badge**, a competition must meet minimum standards and be sanctioned as a **CMP Cup Match**, a **CMP State Championship** or a **State Junior Olympic 3PAR Championship**. Match sanctioning for the Council is administered by the CMP. Detailed information about these programs is available on the CMP website (<https://thecmp.org/youth/air/>). AR1.9.
- ☐ **Virtual Matches.** A virtual match is one where participating teams and clubs shoot on their home ranges under verifiable conditions and use computer technology to compare and rank scores. National Council regulations now permit Virtual CMP Cup Matches (Annex D, #4.). The Orion Result System supports virtual matches and virtual leagues. Virtual matches have been especially useful in making it possible for teams and clubs to continue conducting competitions during covid restrictions.
- ☐ **Preparing the Range for Firing.** See pages 14-16 for a checklist of items to be sure are prepared and ready for the competition.

COMPETITION STAFF

Match sponsors are responsible for having sufficient trained staff who serve during the match to ensure that all athletes receive fair treatment according to the rules. Here are guidelines to follow in determining how many competition staff are needed:

- **Statistical Officers:** Match staffs should have one Chief Statistical Officer (CSO) plus two (2) Scorers for every 10 firing points if manual scoring is done. If the Orion Scoring System is used, one CSO is sufficient for all but the largest competitions. AR6.5.
- **Range Officers:** Match staffs should have one Chief Range Officer (CRO) for the range and for ranges larger than 10 firing points, one (1) RO for every 10 firing points. AR6.2.
- **Equipment Control Inspectors.** If equipment control is required for athlete equipment and clothing before a competition, there must be at least two Equipment Control Inspectors for every 50 athletes in the competition. AR6.4.

SUPPLIES CHECKLIST

Being prepared for a competition means ensuring that expendable supplies are ordered in advance and are available in sufficient quantities. Use this checklist to guide your preparations.

- ☐ Entry Forms
- ☐ Targets.
- ☐ Scoring Equipment (target holders, templates, gauges)
- ☐ EST Paper rolls
- ☐ EST Backing masks
- ☐ EST Aiming masks
- ☐ Printed forms (RIFs, Equipment Control, etc.)
- ☐ CBIs. If athletes who are unfamiliar with this CBI requirement are expected at a competition, Match Officials should have CBIs available to issue to them.
- ☐ Shooting glasses. If shooting glasses are required on the range, have two or three pair available for loaning.

SUBMITTING NATIONAL RECORDS

The National Council recognizes a comprehensive list of National Records for 11 different 3PAR events. There are open records, six sets of program category records and two sets of age group records. National Record certificates are provided when an athlete or team establishes or equals a record. If an athlete or team at your competition fires a score that equals or exceeds a National Record, be sure to download an application form and submit the record so the record can be checked and recognized. Establishing a National Record is an important accomplishment and Match Sponsors should take the steps necessary to be sure athletes who establish records receive the recognition they deserve.

National Record Publication. The current list of National Records is posted on the CMP website at <https://thecmp.org/wp-content/uploads/2020/06/CurrentNatlRcds.pdf>. Match sponsors may want to print the current list of records and make it available at their range.

Standards for Establishing Records. National Records must be fired in sanctioned shoulder-to-shoulder competitions where athletes from two or more organizations compete. If paper targets are used at the match, the targets for a possible record must be forwarded to the CMP with the National Record application. Targets scored by Orion do not have to be submitted for rechecking because Orion image scans are available to use in rechecking. AR11.4.

Form for Record Submission. The application form for submitting a National Record can be downloaded from the CMP website at <https://thecmp.org/wp-content/uploads/NatlApp.pdf>.

EQUIPMENT CONTROL TESTING

Equipment control is the process of checking athletes' rifles and equipment to confirm that any equipment or clothing that athletes use in a competition is legal according to the rules. Equipment checks may be done before a competition (pre-competition testing) or after they finish firing (post-competition testing). When pre-competition testing is done, all athletes are required to submit equipment for checking. Post-competition checks may be done for athletes whose equipment was questioned during a Record Fire stage or for athletes who fire the highest scores or for randomly selected athletes. Match Programs should state whether pre-competition or post-competition equipment control testing will be conducted. AR6.4; AR7.3.

When Equipment Does Not Pass a Pre-Competition Check.

If an item of equipment fails a pre-competition check, the athlete must be given an opportunity to correct the fault and resubmit the equipment item for rechecking. An athlete cannot be permitted to compete with an item of equipment that failed a check and has not been corrected.

When Equipment Does Not Pass a Post-Competition Check.

If an item of equipment fails a post-competition check, any scores fired with that equipment item must be disqualified.

Equipment Control Center. If equipment control testing is done, a separate room or designated area must be set up for this. One long table with a scale, trigger weight and measuring instruments must be set up for Sporter Class athletes. A second long table with a scale, rifle template and measuring instruments must be set up for Precision Class athletes.

Equipment Control Forms. If equipment control testing is done, equipment control forms should be used to document the testing. The form the CMP uses for testing is printed on page 81. Match sponsors may copy and use this form. Completed inspection forms must be given to the athlete who should keep the form with their rifle and equipment to verify that they have been inspected.

Equipment Control Inspectors. The number of inspectors required depends upon the number of athletes in the competition and the time available to do the testing. Anyone who is going to work as an equipment control inspector must be trained on



An Equipment Control Officer checking an athlete's precision rifle jacket overlap. To check clothing or body taping, same sex testing officials must be used.

the details in Rule 4 and have some prior experience in doing equipment testing. The rules include many technical details that cannot be properly checked unless the inspector knows the rules and what to look for. Checks like testing Sporter rifle triggers must be done with special care and precision.

Equipment Items to Check. The tables on the next two pages list items that may be checked. An equipment control testing procedure may test only certain items such as Sporter trigger pull weights, or it may test all or most of the items controlled by the rules. How much testing is done depends upon available testing equipment and the number and skill of the testing inspectors.

Testing Equipment. At a minimum, match sponsors that do equipment control testing should have the following equipment:

- o Scale, max. 10 kg
- o 1.5 lb. trigger weight (*electronic, digital or spring scales may be used for quick checks, but pass/fail decisions must be made with a 1.5-pound trigger weight*)
- o Precision air rifle dimensions template
- o Shooting jacket overlap gauge

SPORTER CLASS EQUIPMENT CHECKS - Rules 4.1-4.3		
Item	Rule	Requirement
Approved rifle	4.2.1	See manufacturer list
Rifle weight	4.2.2	7.5 lbs. max.
	4.2.3	Must lift 1.5 lb. trigger weight
Rifle sights	4.2.8	No corrective or magnifying lenses; must be as required in the rule.
Stock modifications	4.2.4	Check general shape, cheek-piece, pistol grip
Sling	4.3.3	1 ¼" max. width, simple strap
Sling swivel, hand stop	4.2.7	25mm max. depth (with swivel folded)
Shooting glove	4.3.4	An adjustable wrist closure is prohibited
Athlete's clothing	4.3.1	Maximum 2 loose fitting layers; no compression clothing
Athlete's belt	4.3.1 e)	Maximum width 40mm; 3.0mm thickness
Athlete's footwear	4.3.2	Low-cut shoes only. No sandals or stocking feet; no boots; special shooting shoes are prohibited.
Eyewear	4.3.5	Normal prescription eyeglasses are OK; special shooting glasses are not.

PRECISION CLASS EQUIPMENT CHECKS - Rules 4.4-4.6		
Item	Rule	Requirement
Rifle configuration	4.4	Use a template for checking
Rifle weight	4.4 M	5.5 kg maximum
Butt-plate	4.4	See diagram in rule 4.4
Exterior weights	4.4.1	Barrel weights may not exceed 30 mm radius; weights on butt-stock may not project out more than 40 mm; weights may not project down from the lower butt-stock
Pistol grip	4.4.5	A hand or heel rest on the grip is prohibited
Stock fore-end	4.4.6	120 mm max. depth with a fore-end riser attached.
Sights	4.5.1, 4.5.2	A corrective lens may be attached to the rear sight; sights may not have optical enhancements; colored filters are permitted
Shooting jacket	4.6	Check jacket closure overlap (70 mm min.); check pad dimensions; check back panel for non-flexible inserts
Shooting trousers	4.6.2	Top of trousers may not be higher than 50 mm above the top of the hipbone; belts may not be more than 40 mm wide.
Undergarments	4.6.3	2.5 mm maximum. Taping is prohibited. Wearing jeans or ordinary trousers under shooting trousers is prohibited.
Shoes	4.6.4	Check sole for “reasonable” flexibility; boot height cannot exceed 2/3 of length.
Sling	4.6.5	40 mm max. width.
Shooting glove	4.6.6	Must be loose fitting around the wrist.
Kneeling roll	4.7.2	Maximum dimensions: 18 cm diameter – 25 cm length.

Blinders	4.7.7 4.7.8	Blinders worn on the head may extend no more than 80 mm ahead of the forehead. Rear sight blinders may not be more than 30 mm deep.
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Precision Clothing Stiffness and Thickness Testing. NS3PAR

Rules prescribe the same standards for stiffness (3.0 mm depression) and thickness (2.5 mm maximum) that are required in ISSF and USA Shooting rifle clothing testing. If a match sponsor has this testing equipment and testing inspectors who are trained and experienced in its use, the testing may be done. However, testing for rifle clothing thickness and stiffness is not required because the testing equipment for doing these tests accurately is expensive and not readily available. In addition, accurate, fair testing requires a testing inspector who is trained and experienced in using this equipment. AR4.6.8.

Underclothing and Taping. Clothing worn under precision rifle jackets and trousers is also subject to strict controls. All underclothing measured together may not be thicker than 2.5 mm. A major concern is the prohibition of Kinesio, medical or body taping. Underclothing or taping checks are not normally made in 3PAR competitions, but if a Match Sponsor does decide to check, same sex judges must be used to do the checking.

Non-Approved Air Rifles. Most 3PAR competitions are restricted to Sporter Class air rifles listed in Rule 4.2.1 or Precision Class air rifles defined in Rule 4.4. At competitions below the national championship level, match sponsors have the option of authorizing the use of other air rifles, however, any air rifles allowed must be 4.5 mm (.177 cal.). There is also a maximum velocity of 600 fps. The purpose of this rule is to prevent the use of high velocity air rifles that can damage standard pellet traps and targets. AR4.2.1 d).



Equipment Control Form



Date _____

Competition _____

Name _____ CMP # _____

School/Club _____

Please Check Event Entered:

☐ Precision ☐ Sporter ☐ Standing

AIR RIFLE

Make/ Model	Serial #	Rifle Wt.	Trigger Wt.	Template	Approved

SHOOTING CLOTHING

Item	Thickness	Stiffness	Pads	Closure	Approved
Shooting Jacket (precision)					
Shooting Trousers (precision)					
Under Clothing (precision)					
Clothing (sporter)					

EQUIPMENT

Item	Approved	Item	Approved
Belt		Kneeling Roll	
Blinder (head)		Shoes (precision)	
Blinder (rifle)		Shoes (sporter)	
Glove(s)		Shooting Mat	
Hats/Headgear		Sling	
Heel Pad			

Notes _____

Official's Signature _____

White – Official Copy Yellow – Athlete's Copy



RANGE INCIDENT FORM



Date _____ Time _____

Relay _____ Firing Point _____

Event _____ Position _____

Athlete Name _____

CMP # _____

INCIDENT:

Rule(s): _____

*Describe incident in space above — please give
the completed form to the Match Director or CRO*

Match Official: _____

MATCH OFFICIAL COMPETITIONS LOG

Use this form to record the competitions where you serve as a 3PAR Match Official. Record the date, name of the competition and the Match Official position that you filled.

[illegible]



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